Doctoral Program in Materials Science and Engineering
Program Regulations for the Candidacy Examination

Preamble

The following regulations provide specific details for the candidacy exam in the Doctoral Program in Materials Science and Engineering. They are intended to ensure the good and due conduct of the candidacy exam.

1. Field of Application

The present regulations apply to all doctoral candidates enrolled in the Doctoral Program in Materials Science and Engineering at the EPFL as and from 1st September 2008.

2. The candidacy exam

2.a Enrolment for the exam

12 months after your enrolment in the doctoral program, you have to pass a candidacy examination. Please complete the jury proposal on your portal and send it to us two months before the date of the examination.

2.b Prerequisites for the exam

The thesis director has agreed on a date for the candidacy exam with the candidate and the jury members. The candidate has submitted his/her research proposal to his/her thesis director no less than 2 weeks prior to the date of the exam with the IS-Academia cover page. The EDMX administration will distribute the document to the other members of the jury no less than 10 working days prior to the date of the examination.

The research proposal (max 15 pages) contains: title, abstract, statement of the problem, critical review of the relevant literature (with appropriate references), objectives of the thesis and statement of the novelty of the proposed work, description of the preliminary work done by the applicant, and the proposed research program (including approach, new model(s)/technique(s)/idea(s), hypothesis and anticipated results, risks and contingency plans, time frame).

2.c Jury for the exam

The jury is composed of a member of the doctoral program committee (with the exception of the doctoral student thesis director or co-director, and with the exception of the doctoral students’ representative) who acts as the jury president and ensures the fair and good conduct of the candidacy exam, the thesis director (and the thesis co-director, when applicable) and an additional person who is a confirmed EPFL thesis director (called herein ‘the additional expert’). The additional expert will not be a member of the same research unit (chair or laboratory) as the thesis director.

The composition of the jury is subject to the approval of the director of the doctoral program.
2.d Exam Format

The candidacy exam includes an oral presentation by the candidate of his/her research proposal and is followed by questions from the jury members.

The presentation lasts approximately 30 minutes. The presentation consists primarily of an outline of the candidate’s thesis project (the research proposal), including:

- the general context of the thesis subject
- the state of the art of research in the area
- the position of the candidate’s work within the research area
- preliminary research results of the candidate
- the plan and research methodology of the thesis project
- the timeframe for the research work

During his/her presentation, the candidate will demonstrate the originality of his/her thesis subject, the objectives and methods envisaged, as well as the hypothesis and the related scientific arguments.

2.e Evaluation criteria

The jury evaluates the candidate’s potential ability to conduct research leading to PhD degree on the basis of the following principal criteria:

- the pertinence and originality of the thesis subject
- the quality of scientific argument
- the clarity and rigour of the research plan
- the candidate’s responses to the jury’s questions

After the presentation, the jury deliberates in the absence of the candidate.

The jury will decide whether the candidate has passed or failed the exam, and may provide recommendations to the candidate.

The final decision is taken by a majority of the jury after its deliberation. If the jury cannot come to a majority decision, the thesis director will decide the success or failure of the candidacy exam. The jury will define, where applicable, the conditions to be fulfilled by the candidate in re-taking the exam and will fix the time schedule.

2.f Record of the exam

The jury president will complete a Minutes. He/she will forward this record to the administration of the doctoral program, for approbation by the EDMX program director within one week of the exam.

2.g Communication of the result

The thesis director verbally informs the candidate of the result of the candidacy exam immediately thereafter.

The decision is advised to SAC by the administration of the doctoral program.
2.h  Possibility to re-take the exam

In case of failure of the candidacy exam, the program administration will provide a date to the candidate for a second and final attempt. This date will be within 15 months of the enrolment.

In principle, the format and the jury members of the second candidacy exam will be the same as those for the first.

Second failure leads to ex matriculation.