



SES PhD Guidelines

Final Version- November 5, 2008

This document was created in consultation with Faculty representatives from MIT, Porto, IST, the University of Lisbon, and Coimbra

Summary

The goal of this document is to present a unified program for all the different universities that are offering the SES PhD Degree. While each university may implement the program somewhat differently, this document represents the accepted guidelines for the program.

Application to the SES PhD Program

1. Eligibility

- Candidates holding a Bologna 2nd cycle degree
- Candidates holding a M.Sc. degree
- Candidates with a "Licenciatura" (5 years)

All Candidates must demonstrate that they have adequate scientific capabilities to be engaged in a course in this area (i.e., sufficient previous coursework in the sciences, academic papers, etc.)

2. Common Application Procedure for All MITPortugal SES Universities:

The application includes the following documents:

- Application form from the MITPortugal Website (applications are due February 28, 2009)
- Motivation Letter (In English): Why does the student want to pursue a PhD in SES and in which areas does he/she wish to focus?
- *Curriculum vitae*
- Academic certificates
- Official transcripts from universities attended
- Two letters of reference should be submitted by faculty or employers who know the Candidate (in English). The reference letter writers will submit the letters.
- Graduate Record Examination (GRE) (encouraged although not mandatory). Candidates that show excellence on the GRE test will receive a bonus.

- Students who the Selection Committee determines meet the minimum requirements for admission will be called for an interview.
- During the application procedure, students are required to rank their school preferences.

3. Acceptance Procedure

Applicants will be evaluated by a joint committee of all the universities in the MITPortugal SES PhD Program. Successful applicants will be admitted to the PhD program.

Students will learn of their admission or rejection to the program from the MITPortugal Education Coordination office.

At the end of the first year in the PhD program, students will be reevaluated to assess if they should advance to the thesis phase of the program. This decision will be made at their host university, taking into account a recommendation to be made by the MITPortugal Committee (with a representative from all the Portuguese universities offering the SES PhD degree and a representative from MIT).

- In order to continue in the PhD Program, students must meet the following criteria:
 - Pass the minimum number of required European Credits Transfer System (ECTS) courses at their accepting school.
 - Participate in and pass the SES Doctoral Seminar
 - Obtain a minimum average grade of 14 over 20 points at the end of the first year
 - Provide a recommendation Letter from their Faculty Research Supervisor
 - Prepare a research statement of up to 4 pages with a brief summary of the state of the art that outlines the research area of interest, hypothesis, research methodology, strategy for the completion of the research, and provisional time schedule.

Students who do not meet the minimum criteria will not be invited to continue in the PhD Program, but if they have sufficiently completed the coursework requirements for the first year, they will be awarded a diploma of Advanced Studies Course (DEA or DFA). This will be determined by their host universities.

Structure of the PhD course

Year 1

Summer - Acceptance to the PhD Program

September 1st Year- Meeting with the Education Advisors to decide about the course profile to follow.

Fall Semester-First Semester- Students take recommended SES courses and the SES Doctoral Seminar

End of First Semester- Students should find a faculty member at their university who agrees to be their Faculty Research Supervisor. Research Supervisors should help the students through their research paper. At the end of the first year, the Research Supervisor will be asked to write a letter of recommendation for the student that states that the student showed a performance compatible with continuing the dissertation research.

Spring-Second Semester- Students continue coursework

End of First Year (July)- The students' Faculty Research Supervisor should submit a letter on behalf of the student that will be used in a review process. Students who meet the minimum requirements will continue in the PhD program.

September-Second Year- Students need to submit a thesis research plan of 4 pages defined in close collaboration with his/her thesis supervisor. The research plan should provide a brief summary of the context and objectives of the thesis, as well as of the state of the art, hypothesis, research methodology, strategy for the completion of the research and provisional time schedule. This plan will be considered as part of the evaluation process to determine the student's continuation in the program.

Year 2

Selecting a PhD Committee- Each qualified PhD student will be assigned a PhD Committee. This committee is responsible for monitoring and guiding the student's progress through his/her research activities. Students should meet with the PhD Committee at least once per semester. Students who will be conducting research at MIT will be required to have an MIT Faculty member on their committee. Meetings with the MIT Faculty member may take place via video conference. The PhD committee consists of:

- Faculty Research Supervisor and co-supervisor (when necessary)
- Representative from MIT, in cases where student does part of the research work at MIT (MIT representative can offer feedback via video conference or e-mails.)
- 2 experts, at least one external to student's school. (External representatives can offer feedback via video conference or e-mail.)

Starting Thesis Research- Students work with their research supervisor and their PhD Committee on their research design and initial data gathering. *Some universities may require students to participate in a thesis writing course.* Each university may also have other mechanisms for evaluating the progress of students.

Thesis Progress Assessment Paper and Discussion: At the completion of year 2, PhD candidates must demonstrate a thorough understanding of the content, scope and methodology of their chosen research topic. The candidates shall produce a Thesis Assessment paper of about 20-30 pages reporting the state of the art, selected research questions, formal definition of the problem to study and modeling, hypothesis and methodologies to tackle the problem, data collected or plans for it and definition of study cases, tools to be used and preliminary results if existing. **Students will meet with their PhD Committee to present and discuss the progress assessment report and receive feedback. If the PhD Committee determines that the student is not making enough progress on his/her research, this will be discussed with the student and next steps will be determined.**

Year 3 + 4

During year 3 and 4, students should continue research and writing for the thesis. Students should meet at least once per semester with the PhD Committee to check on progress.

Thesis Defense

When the student is ready to defend the thesis, the following process will take place:

1. The candidate delivers the final thesis, together with a letter of acknowledgment of his/her supervisor that recognizes the quality of the work.
2. The supervisor should recommend to the deciding body (which varies at each school) that the Jury consists of the Supervisor, the PhD Committee, and additional members
3. The Jury reads the thesis and decides if it is ready to be presented at a public discussion.
4. At the public discussion, there is a voting, resulting in a decision of PASS or FAIL according to university regulations (in some universities the "PASS" may have different grades). Some minor changes may be recommended for the final printing.
5. In general, the thesis is defended at the end of the 8th semester

Awarding of the Degree

The PhD degree in SES is to be awarded in association with the participating Portuguese Universities in SES.