University of Zurich UZH

Regulations for the Doctoral Program Mathematics

Version December 9, 2013

I. General Information

1. The Institute of Mathematics at UZH (I-Math) and the Department of Mathematics at ETHZ (D-MATH) run a joint doctoral program called the Zurich Graduate School in Mathematics (ZGSM). All PhD students at I-Math and D-MATH are members of ZGSM. ZGSM's goal is to offer an internationally aligned graduate program in Mathematics of the highest caliber, which encompasses all the essential aspects of Mathematics and its applications.

2. These regulations are based on MNF's Ordinance for Obtaining a Doctoral Degree (January 31, 2011) and MNF's Regulations for the Conferral of a Doctorate Part A (December 13, 2012). They apply to all doctoral students in Mathematics at I-Math.

II. Admission

1. Track I: Online application. Candidates apply online using the ZGSM's application tool www.zgsm.ch/index.php?id=application. Application deadlines are on April 30, September 30 and December 31. The Admissions Committee, which consists of professors from both I-Math and D-MATH, selects a group of candidates and forwards their applications to professors at I-Math and D-MATH working in the candidates' fields of interest. Admission to ZGSM - under reserve of financing - depends on an assessment conducted in coordination with the Admissions Committee and requires a professor to agree to be the candidate's advisor. It is also necessary that students fulfill all the formal requirements for matriculation at the institution where their advisor has the right to confer PhDs.

2. Track II: Direct application to a professor at I-Math or D-MATH. Students are admitted to ZGSM - under reserve of financing - if a professor agrees to function as the advisor for their dissertation and if they fulfill all the formal requirements for matriculation at the institution where their advisor has the right to confer PhDs.

III. Structure of the Doctoral Program

1. Curricular Portion
   After regular meetings with their PhD advisor and in accordance with their personal needs, students determine what coursework they will complete. Over the course of their PhD, students should earn a minimum of 12 ECTS Credits. One of these courses should be a lecture offered as part of the ZGSM PhD program (see paragraph 2) or a Doctoral Studies Course (see paragraph 4). One ECTS Credit corresponds to approximately 30 hours of work (see paragraph 2).

   Every semester the ZGSM's newsletter contains a list of lectures for PhD students and the number of ECTS Credits they are worth. Generally, the number of ECTS Credits is equivalent to the number of hours per semester week of lecture, though courses are not worth more than 3 ECTS Credits and are rarely worth 4 ECTS Credits. Practical courses are not counted towards calculating ECTS Credits.

ECTS Credits are only awarded in the case of individual achievement. I-Math views students attending courses regularly, participating in the practical courses and, if required, holding presentations and contributing to discussions as sufficient for receiving ECTS Credits. The instructor makes the final decision as to whether to award ECTS Credits.

The advisor can offer their PhD students a "Doctoral Studies Course" for 1-2 ECTS Credits per semester. This allows the advisor to award credits for achievements by the PhD students at courses that are not listed in the ZGSM newsletter. Such a course could be a winter or summer school (usually worth ¼ ECTS Credits per day), a study group or a course in a subject other than mathematics. PhD students may earn at most 4 ECTS Credits in Doctoral Studies Courses.

ECTS Credits that were earned at another scientific institution as part of a PhD program can be recognized or accredited by the doctoral committee, as long as they are equivalent. The doctoral committee determines whether it should be considered equivalent.

2. Teaching Assistance
   In general, PhD students at I-Math teach an average of at least 50 hours per semester. This requirement is implemented in cooperation with the Studies Coordination in Mathematics. As a rule, PhD students supervise one practical course per semester. The following can be counted towards the teaching requirement: preparation and post-evaluation of practical courses, grading problem sets, advising students, organizing and grading exams, bearing witness to oral examinations, supervising student seminars and assisting in advising Master's students. When calculating work hours, these activities will be taken into account.

3. Doctoral Agreement and Doctoral Committee
   The doctoral committee should consist of a least three member, two of which, including the PhD advisor, should have the right to confer PhDs at MNF. The PhD advisor should select the members of the committee in consultation with the doctoral students during the first 6 months of his or her dissertation. Within these first 6 months, the PhD student and the doctoral committee should write a doctoral agreement specifying the dissertation's goals and execution plan. The students should meet with the doctoral committee at least once a year to discuss the dissertation's progress. If necessary, the goals and execution plan in the doctoral agreement may be modified. If the dissertation's progress remains continually unsatisfactory, the advisor should inform the institute director.

IV. Doctoral Degree

The regulations on doctoral degrees described in Part A section V apply. In particular, l:
- When registering for their PhD defense at the MNF Student Affairs Office, students should also submit two copies of their dissertation to the exam coordinator at I-Math for circulation.
- The circulation round consists of all the professors at I-Math.
- The regulations regarding the PhD defense are: The colloquium involves a 45 minute long public presentation and a disputation of at most one hour. The advisor and at least 3 other professors at I-Math must be present at the disputation.