

Doctoral studies / Credit units

1. Upon regular consultation with their advisors and according to their needs, doctoral students decide on their choice of courses taken in the doctoral program. The student has to take 1/3 of her/his classes outside of his research area.

During their studies, doctoral students are required to earn 12 credit units (KE, see Appendix C.1) from courses of the doctoral program of the ZGSM (see point 2. below) or through the "Doctoral Studies Course" (see point 3. below).

2. In any given semester, the Newsletter of the Zürich Graduate School in Mathematics (ZGSM) publishes the courses offered in that semester together with the corresponding credit units (KE). For lectures at the doctoral level the amount of credit units for a course usually equals the number of hours of lectures per week, advanced undergraduate classes may be also be offered for doctoral students with 1 KE per 2 hours of lectures per week.

3. Each advisor can offer to his/her doctoral students the course "Doctoral Studies Course" with one or two credit units per semester. At the discretion of his/her advisor, a doctoral student can earn in this way credit units for courses not listed on the program of the ZGSM such as summer schools (usually $\frac{1}{4}$ KE per day at the summer school), working groups (Arbeitsgemeinschaften), or courses outside of mathematics. Altogether a doctoral student can earn at most 4 credit units from Doctoral Studies Courses.

4. The thesis and the examination are regulated by the D-MATH at ETHZ (see Appendix A) and the I-MATH at the UZH (see Appendix B) independently.

Appendix A Additional Regulations for doctoral students of the D-MATH at the ETHZ

A.1 The student can only register for the examination once the advisor has verified the documents provided by the student that show that the student has fulfilled all official requirements, including the necessary 12 credit units, for the doctoral program.

A.2 A cumulative dissertation is allowed. The various pieces of the thesis (which may be submitted for publication or already published) need to be on related topics and need to be combined with a general introduction.

A.3 The referee reports for the thesis have to reach the department at the latest 12 days before the doctoral examination.

A.4 The examination comprises two parts. In the first part the student gives a presentation on the thesis of about 45 minutes in length, which is followed by a public discussion. In this part all scientists from Swiss Universities and research institutes as well as students of mathematics and of the subjects that relate to the thesis are invited. The head of the examination committee may also allow other specialists. The second part of the examination consists of a discussion on the topics of the thesis. This takes place only between the examination committee and the student. The examination should take at least 60 minutes but usually not more than 90 minutes. The

language of the examination is decided upon by the examination committee.

A.5 The student has to give a bound copy of her/his thesis to the library of the D-MATH.

A.6 Exceptions to the above rules: If it should happen that the above regulations regarding allowed courses and KE lead to hardship cases, then the doctoral studies committee decides upon request on possible exceptions to these rules.

Appendix C Notes

C.1 A credit unit (abbreviated KE for Krediteinheit) is not to be confused with the ECTS system of “credit points” which is used for the bachelor and master studies program. The number of KE for a course is found in the ZGSM newsletter and will follow the definition that one KE should correspond to 25-30 hours of work for the average doctoral student.

The student earns credit units for a personal contribution in the course. The ZGSM considers the regular attendance, together with the work on the problem sheets, the contributions to discussions, and if required the presentation of topics, a sufficient condition for obtaining the credit units. However, the personal contribution is verified by the lecturer and the precise method of checking the personal contribution will be decided by the lecturer.

C.2 Courses that have been listed in the bachelor or master degree of the student or courses that were required for entrance to the doctoral program do not contribute to the required 12 credit units.

If the distribution of the credit units is not handled by the ETHZ or UZH electronically, then the lecturer signs the document “Testatbogen für Doktorierende”. In exceptional cases the advisor can sign for the lecturer.

C.3 This English translation is provided for your convenience but officially only the German originals “Detailbestimmungen des Doktoratsstudiums D-Math / I-Math” are legally binding.