



## Guideline<sup>1,2</sup>

### Doctoral degree studies at the Department of Mathematics (doctoral degree regulations as of 2016)

#### 1 General

This guideline is an informal abstract about the procedure of doctoral degree studies at the Department of Mathematics. Furthermore, you get an overview about the subject-specific decisions made by the doctoral committee of the Department of Mathematics.

The legal basis for doctoral degree studies at the Department of Mathematics are the doctoral degree regulations (German: Promotionsordnung, abbreviated PromO) of the University of Stuttgart.

Additional regulations may apply to structured doctoral degree programmes of graduate colleges and schools such as Simulation Technology (<http://www.simtech.uni-stuttgart.de/en/career/gs/index.html>) and GRADUS (<http://www.gradus.uni-stuttgart.de/index.en.html>). The doctoral student and his/her doctoral supervisor are responsible for meeting the specific deadlines (e. g. progress report).

The doctoral degree regulations as of February 22, 2016 (German only) became effective on April 1, 2016 and are available at: <https://www.uni-stuttgart.de/forschung/promotion/document/Forschung-Promotion-fuenfschritte-Promotionsordnung.pdf>

Detailed information regarding the procedure of doctoral degree studies are available at: <https://www.uni-stuttgart.de/en/research/doctoral-degree/index.html>.

#### 2 Procedure at the Department of Mathematics

Prior to starting your doctoral degree studies, you need to find a doctoral supervisor. At the Department of Mathematics, the following persons can act as doctoral supervisor (German nomenclature!): Professor, Juniorprofessor, Privatdozent, Hochschuldozent (see PromO §3 (1)4). The supervisor provides a letter regarding his/her confirmation of doctoral supervision to the candidate. This document is mandatory for step 1 "acceptance as doctoral student" and needs to be provided to the Examinations Office.

The procedure of doctoral degree studies consists of the following eight steps:

- Step 1: Acceptance as doctoral student
- Step 2: Doctoral degree studies
- Step 3: Submission of doctoral thesis / Sign-up for admission to oral doctoral examination
- Step 4: Referee reports about the doctoral thesis
- Step 5: Perusal of referee reports
- Step 6: Oral doctoral examination
- Step 7: Publication of doctoral thesis
- Step 8: Doctoral certificate and completion of procedure

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<sup>1</sup> Referring to doctoral degree regulations as of February 22, 2016

<sup>2</sup> Version as of August 8, 2017

## Step 1: Acceptance as doctoral student

Prior to starting your doctoral degree studies, you need to apply for acceptance as doctoral student<sup>3</sup>. You need to submit your application in writing including doctoral studies agreement and all other attachments (see application form) to:

Examinations Office  
University of Stuttgart  
Ms. Simone Hawlitschek  
Pfaffenwaldring 57  
70569 Stuttgart

The doctoral committee of the Department of Mathematics will decide about the acceptance as doctoral student. Acceptance might be subject to meeting additional requirements. The candidate receives a letter informing if the prerequisites for doctoral degree studies have been met and if he/she has been accepted as doctoral student (the doctoral supervisor and the Examinations Office will receive copies of that letter).

### Verification of formal prerequisites:

Candidates holding a degree in Mathematics (diploma, master's degree or Staatsexamen) from a German university are usually accepted as doctoral students without any additional conditions.

Candidates with a foreign degree or a degree from a German university but in another subject, might need to provide proof as to the breadth and depth of their proficiency in Mathematics. The chairperson of the doctoral committee verifies the prerequisites, in alignment with the doctoral supervisor. The doctoral committee can accept the application for acceptance as doctoral student, decline or accept on conditions.

Candidates with foreign degrees need to get their degrees recognized by the University's Admissions Office for Foreign Citizens. Please attach the "Formal Equivalency of Foreign Degrees form" to your application for acceptance as doctoral student. (You submit your documents to the Examinations Office only. The Examinations Office will forward all necessary documents to the Admissions Office for Foreign Citizens.)

### Enrollment as a doctoral student / Change to registration as a doctoral student:

Candidates who have been accepted as doctoral students by the doctoral committee, can enroll. Please send all necessary documents to:

University of Stuttgart  
Admissions Office  
Postfach 10 60 37  
70049 Stuttgart  
Germany

Candidates holding a degree from the University of Stuttgart can change their course of study instead of enrolling as doctoral student.

The maximum period of time for being enrolled as doctoral student is 10 semesters; a prolongation up to 14 semesters is possible.

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<sup>3</sup> Application form for foreign degree holders available online:  
<https://www.uni-stuttgart.de/forschung/promotion/document/Forschung-Promotion-fuenfschritte-Antrag-Annahme-international.pdf>

## Step 2: Doctoral degree studies

During your doctoral degree studies, please consider:

- If you have been accepted on conditions as doctoral student, you will need to fulfil these conditions in due time during your doctoral degree studies.
- Parts of the doctoral thesis can be published in advance with your doctoral supervisor's approval. Vice dean's approval is not necessary.
- The acceptance as doctoral student can be revoked if the doctoral student who mainly works on his/her dissertation, does not submit his/her doctoral thesis within six years. For doctoral students who are mainly occupied otherwise, a maximum time period of eight years applies. The time period starts at the date when the letter of acceptance as doctoral student had been issued.
- After the doctoral thesis is finalized, the doctoral student submits the doctoral thesis to his/her supervisor and waits for his/her approval. After the doctoral supervisor's release, the doctoral thesis can be submitted to the vice dean's office (see step 3).

## Step 3: Submission of doctoral thesis / Sign-up for admission to oral doctoral examination

The candidate submits his/her doctoral thesis to the vice dean's office. (GRADUS members also need to attach a declaration by their doctoral supervisor proving that the minimum quality standards have been met and that the progress report as per §5 had been accepted.) Submission of the doctoral thesis implies sign-up for admission to the oral doctoral examination. If you had been accepted on conditions as doctoral student, you must provide proof that you fulfilled all conditions upon submission of your doctoral thesis. Please consider:

- The doctoral thesis can be written in German or English.
- The candidate submits (number of referees + 1) copies in adhesive binding to the vice dean's office. In addition, the candidate provides his/her doctoral thesis as pdf file on CD. The doctoral thesis does not need to contain yet any referee name or date of the oral doctoral examination. (After the oral doctoral examination, these information must be included on the front pages of the copies delivered to the University Library for publication.)
- Each copy of the doctoral thesis needs to contain a declaration signed by yourself and stating that you wrote the doctoral thesis yourself except for explicitly cited references. Furthermore, the doctoral thesis must contain summaries in German and English which should not exceed two pages (per language) in DIN A4 format. Attaching a CV (max. one page) is optional.

## Step 4: Referee reports about the doctoral thesis

At least two referees must report on the doctoral thesis. The following details need to be considered:

## Doctoral degree studies at the Department of Mathematics

- **Referee report:** The doctoral supervisor is the main referee and suggests at least one more referee to the vice dean. At least one referee must be “ordentlicher Professor” (German nomenclature) at the Department of Mathematics at the University of Stuttgart. Regarding SimTech doctoral studies, at least one referee must belong to an external institution. For the appointment of all referees, the vice dean obtains approval from the Mathematics doctoral committee via an e-mail survey. The rights of the chairperson of the doctoral committee remain unaffected (decision by the Mathematics doctoral committee as of January 25, 2017).
- **“Summa cum laude” degree:** If a “summa cum laude (mit Auszeichnung)” degree becomes apparent, the doctoral supervisor must inform the vice dean in advance and must propose two potential referees; one out of the two referees must belong to an external institution. All referee reports must clearly indicate that the doctoral thesis is an outstanding achievement (decision of the Mathematics doctoral committee as of April 26, 2006). Furthermore, on behalf of the examining committee, the vice dean appoints a second additional examiner in a decision on short notice. This second additional examiner must represent the breadth of the subject. In addition, upon approval of the doctoral student, all members of the doctoral committee can attend and ask questions at the oral doctoral examination (decisions by Mathematics doctoral committee as of November 23, 2005 and December 21, 2005).
- **External referees:** By default, all referees belong to the examining committee. If external referees cannot attend the oral doctoral examination, a representative needs to be appointed.
- **Official correspondence with the referees:** The vice dean’s office sends copies of the doctoral thesis to the referees along with letters signed by the chairperson of the doctoral committee.
- **Duration of the evaluation procedure:** The evaluation shall be completed normally within three months.

### Step 5: Perusal of referee reports

After arrival of all referee reports and prior to the oral doctoral examination, the reports and the doctoral thesis are available for on-site perusal by the Mathematics doctoral committee in the vice dean’s office (PromO §10(3)b). The members of the Mathematics doctoral committee are informed about the perusal via e-mail. Any objection can be addressed in writing to the vice dean within the period of perusal (decision by Mathematics doctoral committee as of October 19, 2005).

**Duration of perusal:** In case of an oral doctoral examination within teaching weeks, the duration of perusal is at least 14 days; in non-teaching weeks at least 21 days (decision by Mathematics doctoral committee as of October 16, 2013).

### Step 6: Oral doctoral examination

- **Examination date:** The doctoral student schedules the examination date in alignment with the members of the examining committee. The doctoral supervisor informs the vice dean’s office about the desired date and time. If possible, oral doctoral examinations should not take place within non-teaching weeks. In non-teaching weeks, the month of August (school holidays) must be skipped (decision by Mathematics doctoral committee as of October 16, 2013).

- **Examining committee:** The vice dean contacts the doctoral supervisor regarding the members of the examining committee. For the appointment of the additional examiners, the vice dean obtains approval from the Mathematics doctoral committee via an e-mail survey. The rights of the chairperson of the doctoral committee remain unaffected (decision by the Mathematics doctoral committee as of January 25, 2017). Furthermore, the vice dean appoints the chairperson and, if applicable, approves the representative of an absent referee.
- **Appointment of additional examiner:** Besides the referees, an additional examiner belongs to the examining committee. The additional examiner must represent the breadth of the subject (if a "Summa cum laude" degree becomes apparent, two additional examiners must be part of the examining committee; see step 4). Additional examiners must not be referees and must belong to another institute than the doctoral supervisor. For doctoral supervisors who do not belong to any institute of the Department of Mathematics, additional examiners are defined in alignment with the vice dean (decision by Mathematics doctoral committee as of October 16, 2013).
- **Participation of external referees:** Travel costs of external referees are usually reimbursed by the Central Administration (information from the travel expense department (German only) at [http://www.uni-stuttgart.de/reisekosten/besondere\\_regelungen/doktorpruefungen/index.html](http://www.uni-stuttgart.de/reisekosten/besondere_regelungen/doktorpruefungen/index.html).) The administrative assistant of the doctoral supervisor takes care of all necessary steps in alignment with the vice dean's office.
- **Talk and oral doctoral examination:** The vice dean's office sends an invitation to the talk and to the oral doctoral examination to the members of the doctoral committee, to external referees (if any), to the dean of the faculty and to the rector. In addition, the vice dean's office sends an invitation to the talk (open to university staff and students) to the colloquium distribution list. The examination takes 60 to 120 minutes. Prior to the examination, the (approx.) 45-minute talk takes place. When submitting the doctoral thesis to the vice dean's office, the doctoral student informs about the title of his/her talk.
- **Room:** The doctoral student is responsible for preparing the room for the talk and for the oral doctoral examination.
- **Examiners' report:** After the oral doctoral examination, the vice dean's office sends the examiners' report, copies of the referee reports and the "Legeschein" to the Examinations Office. The examiners' report must include start time and end time of the examination, the grades as per the doctoral degree regulations and the signatures of the examiners committee members.

## Step 7: Publication of doctoral thesis

After the oral doctoral examination, the doctoral student revises the doctoral thesis, if applicable, and considers any changes requested by the referees. Publication of the doctoral thesis is defined in §13 of the doctoral degree regulations. You need to comply with the "Merkblatt für Doktoranden über die äußere Form der Dissertationen" (pages 24 to 28 of the doctoral degree regulations). After release of the final version by the doctoral supervisor, the doctoral student delivers a prescribed number of copies (as per doctoral degree regulations) to the University Library within one year after the oral doctoral examination.

## Doctoral degree studies at the Department of Mathematics

The University Library sends four copies to the doctoral supervisor. He/she verifies the copies, forwards one copy to the vice dean's office and releases the doctoral thesis for publication via a letter to the vice dean's office.

### **Step 8: Doctoral certificate and completion of procedure**

After the doctoral certificate has been delivered to the recipient of the doctorate, the vice dean's office reports the completion of the doctorate to the Association of German Mathematicians (German: Deutsche Mathematiker-Vereinigung, abbreviated DMV) via internet, completes the list of doctorates and takes care of the filing.