



Guideline ¹

Doctoral degree studies at the Department of Mathematics (doctoral degree regulations (PromO) as of 2019)

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 valid doctoral degree regulations (German: Promotionsordnung, abbreviated PromO) of the University of Stuttgart.

For doctoral degree studies at the Simulation Technology Graduate School of the SimTech Excellence Cluster (<https://www.simtech.uni-stuttgart.de/en/gs/>) the additional regulations have to be considered. The doctoral student and his/her doctoral supervisor are responsible for meeting the specific deadlines (e. g. progress report).

The doctoral degree regulations (PromO) as of March 1, 2019 became effective on April 1, 2019 and are available at: [OPUS:Doctoral degree regulations of the University of Stuttgart as of March 1, 2019](#). Detailed information regarding the procedure of doctoral degree studies are available at: [Doctoral Degrees and Habilitations – Faculty 8 – University of Stuttgart](#) and at [The five steps to gain your doctoral degree](#).

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: professor, tenure track professor, junior professor, private lecturer, higher education institution lecturer or university lecturer of the University of Stuttgart, who is entitled to the right of reporter (see PromO §3 Para. 1 (3)). 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 together with the application documents.

With the conclusion of the written agreement on doctoral studies the candidate **has to register** using the doctoral student software of the University of Stuttgart (see PromO §4 3 (6)). You can find a guideline on the internal webpages of the Department of Mathematics.

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 dissertation / Application for admission to oral doctoral examination
- Step 4: Reporters' assessment of the dissertation
- Step 5: Perusal of reports
- Step 6: Oral examination
- Step 7: Publication of the dissertation
- Step 8: Doctoral degree certificate and completion of procedure

¹ Version as of September 17, 2019

Step 1: Acceptance as doctoral student

At the beginning of the doctoral procedure, usually prior to starting on the dissertation, you need to apply for acceptance as doctoral student. You need to submit your application in writing including all attachments to:

GRADUS - Promovierendenmanagement
Ms. Simone Hawlitschek
Pfaffenwaldring 5c
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 GRADUS will receive copies of that letter).

Private lecturers will be entitled ad personam and for each specific case to act as a reporter or supervisor. The faculty council will decide on this (Decision of the doctoral committee on November 14, 2018).

Verification of formal prerequisites:

Candidates holding a degree in Mathematics (Diplom, 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 application for acceptance as doctoral student can be accepted, declined or accepted on conditions.

When applying as doctoral student, candidates with foreign degrees need to get their degrees recognized by the University's Admission Office for Foreign Citizens. Please attach in addition to the other documents the "Formal Equivalency of Foreign Degrees Form" (available in the internet) to your application as doctoral student.

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

Candidates accepted as doctoral students must enroll for the duration of the doctoral degree studies in accordance with the Act on Higher Education of the Land of Baden-Württemberg (Landeshochschulgesetz – LHG) in its current version. The enrollment is made via the C@mpus Management System. Information can be found at [Registering, applying and enrolling / University of Stuttgart](#).

Employees of the University of Stuttgart have the option not to enroll. If you wish to do so, please provide the completed and signed "Erklärung für Hauptberufliche" to the Division Personnel.

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.

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.
- The acceptance as doctoral student can be revoked if the doctoral student who mainly works on his/her dissertation, does not submit it 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.
- Parts of the dissertation can be published in advance with your doctoral supervisor's approval. Vice dean's approval is not necessary.
- According to PromO §2 Para. 6, the dissertation can be prepared publication-based in a cumulative form, if this is permitted according to the directives of the doctoral committee in agreement with the faculty council and if the supervisor approves the preparation of a publication-based dissertation. The Department of Mathematics (decision of the doctoral committee on May 15, 2019) in agreement with the faculty council (decision of the faculty council on June 19, 2019) has decided to allow cumulative dissertations. The Department's directives may be found on the homepage at [Doctoral Degrees and Habilitations – Faculty 8- University of Stuttgart](#)
- After the dissertation is finalized, the doctoral student submits it 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 dissertation / Application for admission to oral examination

The candidate submits his/her dissertation to the vice dean's office adding the doctoral supervisor's declaration that the achievements according to the written doctoral agreement have been met. This declaration form (Nachweis erbrachte Leistungen) can be found on the internal webpage – Mathematik intern (Decision of the doctoral committee on October 17, 2018)

Doctoral students at the GS SimTech have to add also the confirmation concerning meeting the GS SimTech Regulations "Ausführungsverordnung der GS SimTech".

Submission of the dissertation implies the application for admission to the oral 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 dissertation can be written in German or English. It must contain brief summaries (abstracts) in German and usually in English which should not exceed two pages (per language) in DIN A4 format.
- The candidate submits (number of reporters + 1 vice dean) (+1 for SimTech) copies in adhesive binding to the vice dean's office. In addition, the candidate provides the dissertation in electronic form as pdf file. The dissertation does not yet need to contain any reporter name or

date of the oral examination. After the oral examination, this information must be included on the front pages of the copies delivered to the University Library for publication.

- Each copy of the dissertation **has to** contain a declaration signed by yourself stating that you wrote the dissertation yourself except for explicitly cited references.
- When submitting a dissertation in cumulative-based form it is mandatory to meet the contents' requirements as per the [Department's directive](#) .

Step 4: Reporter's assessment of the dissertation

At least two reporters assess the dissertation. The following details need to be considered:

- **Reporter's assessment:** The doctoral supervisor is usually the main reporter and suggests at least one more reporter to the vice dean. At least one reporter must be professor "ordentlicher Professor" at the Department of Mathematics at the University of Stuttgart. Regarding SimTech doctoral studies, at least one reporter must belong to an external institution. For the appointment of all reporters, the vice dean obtains approval from the 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 (with distinction)" degree becomes apparent, the doctoral supervisor must inform the vice dean in advance and must propose two potential reporters; one out of them must belong to an external institution. All reports must clearly indicate that the dissertation is an outstanding achievement (decision of the doctoral committee as of April 26, 2006). Furthermore, on behalf of the examination 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 of doctoral committee as of November 23, 2005 and December 21, 2005).
- **External reporters:** By default, all reporters belong to the examination committee. If external reporters cannot attend the oral doctoral examination, a representative needs to be appointed.
- **Official correspondence with the reporters:** The vice dean's office sends copies of the dissertation to the reporters 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 reports

After arrival of all reports and prior to the oral doctoral examination, the reports and the dissertation are available for on-site perusal by the doctoral committee in the vice dean's office (PromO §10 Para. 3(b)). The members of the 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 of 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 of 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 examination 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 of doctoral committee as of October 16, 2013).
- **Examination committee:** The vice dean contacts the doctoral supervisor regarding the members of the examination committee. For the appointment of the additional examiners, the vice dean obtains prior approval from the doctoral committee in order to guarantee transparency. This request for approval is sent via an e-mail. The rights of the chairperson of the doctoral committee (vice-dean) remain unaffected (decision of the doctoral committee as of January 25, 2017). Furthermore, the vice dean appoints the chairperson and, if applicable, approves the representative of an absent reporter.
- **Appointment of an additional examiner:** Besides the reporters, an additional examiner of the doctoral committee belongs to the examination 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 examination committee; see step 4). Additional examiners must not be reporters 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 of doctoral committee as of October 16, 2013).
- **Participation of external examiners:** Travel costs of external reporters are usually reimbursed by the Central Administration (information from the travel expense department (German only) at <https://www.beschaefigte.uni-stuttgart.de/uni-services/finanzen/reisekostenabrechnung-fuer-gaeste/>). The request for reimbursement has to be transmitted to and approved from the Travel Expense Department **prior** to the oral examination. 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 reporters (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.
 - Prior to the examination, a usually 30-minute public talk takes place. According to the doctoral committee's decision, this talk is part of the oral examination and is considered for the grading according to §12 (PromO §11 Para. 2). The examination takes between one and two hours. If a public talk is an integral part of the oral examination, at least one hour of this must be allocated to the examination discussion (PromO §1 Para 5). When submitting the doctoral thesis to the vice dean's office, the doctoral student informs about the title of his/her talk.

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- **Decision of the doctoral committee on May 15, 2019:** In the Department of Mathematics a public talk of, as a rule, forty-five minutes is integral part of the oral examination and is considered for the grading according to § 12 PromO. The additional regulations as of §11 Para. 5 PromO do apply.
- **Room:** The doctoral student is responsible for reserving and preparing the room for the talk and for the oral doctoral examination (usually the faculty room 8.122).
- **Grading of the dissertation and the oral examination, decision on the overall grade:** will be done in accordance with §12 PromO.
- **Examiners' report:** After the oral doctoral examination, the vice dean's office sends the examiners' report, copies of the reports and the "Legeschein" to GRADUS. 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 examination 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 reporters. 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". 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. Information on this can be found here: [Abgabe Stuttgarter Dissertationen \(German only\)](#)

The University Library sends four copies to the doctoral supervisor. He/she verifies the copies, forwards one copy (in case of dissertation within SimTech 2 copies) to the vice dean's office and releases the doctoral thesis for publication via a letter to the vice dean's office.

After publication please send an abstract of the dissertation in German and English to the vice dean's office and allow its publication on the department's homepage.

Step 8: Doctoral degree certificate and completion of procedure

Upon request of the doctoral student, an English translation of the doctoral degree certificate will be prepared. The form can be found at [Forms for students](#).

After the doctoral degree 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) completes the list of doctorates and takes care of the filing.