



Information on the Stipulations of the new Doctoral Regulations

1. The doctoral regulations of the Faculty of Mechanical Science and Engineering of 22nd March 2018 have been published in the official announcements 06/2018 on 25th April 2018. Since 26th April 2018, the new Doctoral Regulations of the faculty are therefore valid.

- All new doctoral projects commenced after the entry into force of these regulations (beginning with the acceptance as doctoral candidate) will be carried out based on the content of these regulations.
- Already ongoing procedures will be continued according to the old regulations of 2001, unless the doctoral candidate submits an application to change to the new regulations, which must be approved by the doctoral supervisor.

2. Admission to the doctorate programme (§ 6) and additional academic achievements (§ 9)

You will be admitted to the doctoral examination procedure if you

- have obtained a *Diplom*, Master's or Magister degree from a university or a state examination in an **engineering, natural sciences or mathematics study programme** with a **grade** of at least **"good"** and have completed the corresponding thesis with a **grade** of at least **"good"**,
Applicants who have been admitted to doctoral studies and have earned at least 300 credit points but less than 60 credit points from subjects with engineering content or less than 300 credit points but at least 60 credit points from subjects with engineering content during their studies must, in conjunction with their acceptance as a doctoral candidate, agree to complete additional academic courses, which generally amount to between 10 and 20 credit points.
- have obtained a *Diplom*, Master's or Magister degree from a university or completed the state examination with at least the grade "satisfactory" (this also includes a degree in a course of study not listed above) and have passed the aptitude test according to § 7;
For applicants, who have been admitted to the doctorate programme following a positive aptitude test, the scope of additional academic course may include up to 30 credit points.
- have obtained a Bachelor's degree from a university in an engineering course of study, the focus of which corresponds to a study programme in the Faculty of Mechanical Science and Engineering, with at least the grade "very good" and have passed the aptitude test according to § 7.
The scope of the additional academic courses should be as follows when graduating with a degree of
 - 1) at least 240 credit points with up to 30 credit points,
 - 2) at least 210 credit points with up to 60 credit points and
 - 3) at least 180 credit points with up to 90 credit points.

3. Aptitude test (§ 7)

This includes:

- a written report (project outline) containing statements on the state of academic knowledge, the relevant literature, the working hypotheses in relation to the intended doctoral thesis, as well as a work plan. For this purpose, a written statement (vote) must be submitted by the responsible higher education lecturer of the faculty or, in the case of cooperative procedures, also by the intended academic supervisor of the cooperating institution.

Alternatively,

- proof of admission to a graduate school, in which the faculty as a whole or individual higher education lecturers are involved, must be submitted.
If the applicant's basic suitability has been positively assessed or his/her admission to a graduate school has been proven, he/she must complete two subject examinations that are related to the topic of the doctoral dissertation with a grade of at least "good" as a valid examination attempt. A second attempt is excluded.

4. Admission as a doctoral candidate (§ 8)

- Whoever fulfils the admission requirements according to § 6 and intends to complete a doctorate at the Faculty of Mechanical Science and Engineering must apply for admission as a doctoral candidate before starting the doctoral thesis. An application for admission as a doctoral candidate is an expression of commitment to the faculty to complete a doctorate there within the next six years.
- The Doctoral Committee decides on the admission or rejection of a doctoral candidate. Admission may be combined with the issuing of regulations according to § 9.
- The doctoral candidate is supervised by a higher education lecturer, an extraordinary professor, an honorary professor, a Privatdozent (*official title of a lecturer with a teaching load of at least 2 hours per semester*) or a TUD Young Investigator of the faculty, in the case of cooperative procedures also by a higher education lecturer of the cooperating institution (academic supervisor).
- Admission as a doctoral candidate is a mandatory prerequisite for commencing the doctoral degree. It should take place at least one year before starting the doctoral degree.

5. Status presentation (§ 10)

- Before starting the doctoral degree, the applicant must give an academic presentation in German or English on the state of research in his/her field of work (status presentation) followed by a professional discussion.
The status presentation lasts a maximum of 45 minutes, the total duration of the status presentation and professional discussion should not exceed 2 hours.

The status presentation and the subsequent professional discussion are public and must be announced in an appropriate manner one week before it takes place.
They can also be held as part of a conference or an interdisciplinary doctoral colloquium.
The academic supervisor must be present.

- Following the status presentation and the professional discussion, the academic supervisor assesses the overall performance of the doctoral candidate as "passed" or "failed" and informs the chairperson of the Doctoral Committee of the result; the chairperson informs the doctoral candidate in writing of the result.
If the status presentation is not passed, it can be repeated once, at the earliest three months later.
If the status presentation is not passed a second time, the doctoral degree will be terminated without result. The doctoral candidate must be removed from the list of doctoral candidates.
- For members of a graduate school, the status presentation is deemed to have been successfully completed if the relevant regulations of this institution include a colloquium on work progress of the candidate. The doctoral candidate's proper fulfilment of this obligation is confirmed in writing by the academic supervisor.
The confirmation must be submitted with the application for starting the doctoral degree.

6. Dissertation (§ 12)

- The dissertation should be written in German or English. The source material used for the dissertation, as well as other resources, must be stated in full. Work that has already served as a basis for previous examinations or graduations may not be used as a dissertation. The prior publication of partial results of the dissertation requires the written consent of the academic supervisor.
- In personal and independent reviews, the examiners of the dissertation recommend to the Doctoral Committee that the work be accepted or rejected as a dissertation. If acceptance is recommended, the dissertation must be evaluated by the examiners with the following grades and differentiating marks:

magna cum laude = very good (1.0; 1.3)

- a particularly commendable performance

cum laude = good (1.7; 2.0; 2.3)

- a good performance

rite = satisfactory (2.7; 3.0)

- a performance that meets the requirements

→ If the admission of the dissertation is rejected, then the following evaluation is to be provided:

non sufficit = not sufficient
- an unusable performance

7. Examiners of the Dissertation (§ 12)

→ The dissertation is evaluated by two examiners, in justified cases also by three examiners, who are qualified for the academic questions of the dissertation. An examiner must be a professor appointed according to § 60 or § 62 Act on the Autonomy of Institutions of Higher Education in the Free State of Saxony (SächsHSFG) of the Faculty of Mechanical Science and Engineering. The additional examiner(s) may be university professors, professors at universities of applied sciences, junior professors as well as TUD-Young Investigators, or they must at least prove qualifications equivalent to *habilitation* [qualification for a teaching career in higher education]. For cooperative doctoral degrees, a university professor of the cooperating institution must be appointed as an examiner. When appointing the examiners, it must be ensured that the doctoral candidate has not been in an employment or subordinate relationship with at least one of the examiners in the last three years prior to starting the doctoral degree, and has not published any joint publications with an examiner during the specified period.

8. Doctoral Viva (§ 13)

→ If the dissertation has been accepted, the doctoral candidate must prove his or her in-depth knowledge of the subject area of his/her dissertation in a non-public scientific examination (doctoral viva).

The doctoral viva is chaired by the chairperson of the Doctoral Committee. It is usually conducted in German. At the candidate's request, the Doctoral Committee may allow the doctoral viva to be held in English. The application must be received by the chairperson of the Doctoral Committee no later than one week before the date of the doctoral viva.

The doctoral viva is not open to the public. The members of the Doctoral Committee may attend the doctoral viva and are entitled to ask questions.

9. Early Doctoral Viva (§ 14)

→ The doctoral viva can be replaced by the so-called early doctoral viva. For this the doctoral candidate has to provide either

1. the acquisition of additional qualifications amounting to at least twelve credit points from at least two subjects, which were neither part of the studies, nor the aptitude test according to § 7 para.3, nor the additional academic performance according to § 9, or
2. evidence of the successful participation in a graduate school training programme according to para. 4, together

with an application to start the doctoral degree.

→ The candidate must apply to the chairperson of the Doctoral Committee for the examinations or academic assessments and have them approved by the Doctoral Committee.

The application cannot be submitted until all conditions imposed in connection with acceptance as a doctoral candidate have been fulfilled. The doctoral candidate must enclose proof of this with the application. If the application is rejected, the doctoral candidate may submit a new application or file the doctoral viva according to § 13.

- The examinations or academic assessments shall be taken from the range of modules offered by Technische Universität Dresden, primarily from the Faculty of Mechanical Science and Engineering. The implementation and evaluation of the examinations or academic assessments is governed by the relevant examination regulations, unless otherwise specified below.

If the relevant module examinations are written examinations, these can also be completed orally and outside the regular examination period. In addition, all oral examinations must be invigilated by two examiners, or one examiner in the presence of a member of the Doctoral Committee.

The examiners, who must meet the requirements of § 8 para. 4, are appointed by the Doctoral Committee. The examiners shall inform the chairperson of the Doctoral Committee of the examination results immediately.

In order to replace the doctoral viva, all examination performances in the first attempt must be passed with at least the grade "good"; a repeat attempt is excluded.

Exams taken more than one year before the start of the doctoral degree will not be considered.

- The doctoral viva may also be replaced if the training programme at the graduate school was completed with an overall grade of at least "good" and the scope of the subject-specific additional qualification acquired therein amounts to at least ten semester hours per week or twelve credit points.

If the proof required to replace the doctoral viva cannot be provided, the doctoral candidate must complete the viva according to § 13.

10. Defence

- Once the dissertation has been accepted and the doctoral viva passed, the doctoral candidate must present the results achieved with the dissertation in a public presentation and present himself in a subsequent academic discussion to defend his results (defence).
- If the candidate fails to pass the doctoral viva, the defence shall be cancelled.
- The defence is led by the chairperson of the Doctoral Committee. It is usually conducted in German. In agreement with the Doctoral Committee, the defence may be conducted in English if the doctoral candidate requests this from the chairperson of the Doctoral Committee at least one week in advance.

11. Publication of the dissertation

- The candidate is obliged to make the accepted and approved dissertation available to the scientific community in an appropriate manner within a period of one year.

- The candidate can fulfil this obligation by selecting from the following options:
 1. handing over six copies in printed and bound form to the Saxon State Library – Dresden State and University Library (SLUB) and one copy to the supervisor as well as additional electronic publication on the internet according to the guidelines of the SLUB;
 2. handing over six copies of a version produced and distributed by a commercial publisher to the SLUB, as well as one copy to the supervisor, if the print run has at least 150 copies and, at least on the reverse side of the title page, the correspondence with the dissertation is indicated, stating the title as well as the place and time of the doctorate;
 3. handing over ten copies in printed and bound form to the SLUB and one copy to the supervisor.

12. Quorum of the Doctoral Committee

- The presence of the chairperson and at least two members of the Doctoral Committee is required to constitute a quorum. At least one examiner should be present; in the case of three examiners, the chairperson and at least three members must be present.