§ 7. Regulations for the dissertation

(1) The dissertation is a work of scholarship focusing on a topic that is primarily of an engineering nature.

(2) The dissertation must demonstrate the candidate's capacity to perform independent scientific research and to present the results of such work in an appropriate manner. The dissertation must contain:

- a title page according to the specifications given in Appendix 2
- a table of contents
- a concise summary (i.e. abstract)
- a complete bibliography of all literature cited in the thesis
- a curriculum vitae (CV) describing the candidate’s educational background and employment history (signed by hand).

(3) The dissertation is to be written in German or English. Exceptions to this rule may be allowed only if proper scientific evaluation of the dissertation can be ensured. Such an exception requires prior approval by the Promotionsausschuss. If the dissertation is not written in English, then it must include an English translation of the thesis title and abstract.

(4) Prior publication of parts of the dissertation is permitted, as long as explicit declaration of the previously published sections appears in the dissertation itself.

§ 8. Refereeing and evaluation of the dissertation

(1) The Promotionsausschuss assigns two or more referees to evaluate the submitted dissertation. The referees should be university professors or lecturers having earned the Habilitation qualification; in exceptional cases, emeritus or retired professors can be asked to serve in this capacity. Suggestions from the candidate for suitable referees can be taken into consideration. One of the referees must be a member of the Faculty of Engineering and Computer Sciences at Ulm University working in the field of engineering and holding the position of professor, lecturer (with Habilitation), or doctoral-degree-holding scientist qualified according to § 2 (1) d) sentence 2.

(2) One of the referees should be the university professor, lecturer (with Habilitation), or doctoral-degree-holding scientist (qualified according to § 2 (1) d) sentence 2) under whose supervision the thesis work was performed. The remaining referees
must be doctoral-degree-holding scientists with expertise in the subject area of the dissertation. They need not be affiliated with Ulm University.

(3) For a dissertation focusing on an interdisciplinary topic, the Promotionsausschuss may assign additional referees having expertise in relevant research areas not covered by those of the thesis supervisor.

(4) Each referee is to submit an independent and well-founded evaluation of the dissertation within 6 weeks to the Promotionsausschuss. The referee report must contain a recommendation either that the dissertation be accepted for partial fulfilment of the requirements of the doctoral degree or that it be rejected, and the referee must propose a grade for the thesis. If a referee report is not submitted by the deadline set by the Promotionsausschuss, then the latter can withdraw the corresponding invitation to the referee and extend it to another referee.

(5) The proposed grade for a dissertation that has been recommended for acceptance can be:

"sehr gut" (very good) = 1
"gut" (good) = 2
"bestanden" (pass) = 3.

Intermediate grades of 1.3 / 1.7 / 2.3 and 2.7 are also permitted.

(6) In the case of particularly outstanding achievement, a referee may recommend adding the commendation "Mit Auszeichnung" (with Distinction) to the overall grade for the doctoral degree, provided the candidate performs at a correspondingly high level during the doctoral degree colloquium. This recommendation must be justified in the referee report.

(7) Upon receipt of all referee reports, the Promotionsausschuss informs the Faculty's university professors and lecturers (with Habilitation) that the dissertation and referee reports are available for inspection for 14 days in the Office of the Dean. During this time, any written objections to the scholarly content of the dissertation and its evaluations will be accepted for consideration by the Promotionsausschuss.

(8) In the event that all referees recommend acceptance of the dissertation and no formal objections were submitted during the inspection period, the Promotionsausschuss will declare the thesis to be accepted, and the Promotionsausschuss will compute the final dissertation grade as the arithmetic average (not rounded) of the grades proposed by each of the referees.

§ 9. Negative evaluation, objections, deficiencies

(1) If one of the referees recommends rejecting the dissertation, the Promotionsausschuss will invite an additional referee to evaluate the thesis. The inspection period described in § 8 (7) begins only after receipt of the additional referee report. After the inspection period has closed, the Promotionsausschuss will consult with each referee before deciding whether to accept or reject the dissertation.
In case of acceptance, the *Promotionsausschuss* will assign a final grade to the dissertation.

(2) If an admissible objection is submitted during the inspection period, then the *Promotionsausschuss* will decide—in consultation with each of the referees—whether the objection should be taken into consideration when assigning a final grade to the thesis.

(3) If the referees unanimously recommend rejecting the dissertation, then the *Promotionsausschuss* will confirm this recommendation upon expiration of the inspection period. In this event, § 9 (2) is no longer applicable.

(4) Rejection of the dissertation means that the candidate's application to the *Promotionsausschuss* for conferral of the doctoral degree has been declined. The application and evaluation procedure is then terminated according to § 16 (2). The rejected dissertation is to be archived along with its referee reports.

(5) In the event of deficiencies not warranting outright rejection of the dissertation, a referee can recommend to the *Promotionsausschuss* that acceptance be stipulated upon mandatory revision. The *Promotionsausschuss* will set a reasonable deadline for performing the necessary corrections. If the candidate does not meet this deadline, the dissertation will be considered to have been rejected. The primary basis for evaluation of the dissertation is the first submitted version, but any revisions undertaken by the candidate are also to be taken into account in an appropriate manner. If the referee in question approves the candidate's revisions, then the dissertation will be classified as accepted.

§ 10. Doctoral degree colloquium

(1) The doctoral degree colloquium consists of an oral presentation, scientific discussion and an oral examination, and it takes place in front of an examination board appointed by the *Promotionsausschuss*. Members of the Examining Board include at least one member of the *Promotionsausschuss*, the referees of the dissertation, as well as at least one representative of a further engineering field. The Examining Board selects one its members to be Chairman and another to be Recording Secretary. These offices should not be filled by the dissertation referees.

(2) First, the candidate presents his or her thesis work in the form of an oral presentation lasting approximately 20 minutes. This is followed by a 20-minute critical discussion. The colloquium closes with an oral examination of about 40 minutes duration covering the dissertation and related fields of research.

(3) Professors and lecturers (with *Habilitation*) of the Faculty of Engineering and Computer Sciences, the President and Vice-Presidents of the University, as well as the Deans of the other Faculties are to be invited to the doctoral degree colloquium. They have the right to pose questions to the candidate. The colloquium is open to the public to the extent that space permits. For justifiable reasons or by request of the candidate, the entire colloquium, or only parts of it, may be closed to the public. Decisions in this regard are made by the Examining Board.
(4) The date of the doctoral degree colloquium is to be set and conveyed in writing to the candidate immediately after the dissertation has been accepted by the Promotionsausschuss. The period of time between informing the candidate and the date of the colloquium should be at least 14 days. A shorter period is permissible only with the candidate’s approval.

(5) The date and location of the doctoral degree colloquium are to be made public.

(6) The proceedings of the doctoral degree colloquium are to be recorded in writing.

§ 11. Evaluation of the colloquium

(1) Immediately after the colloquium has concluded, the Examining Board evaluates the candidate’s performance. Each member of the board independently assigns a grade from the following list of possibilities:

“sehr gut” (very good) = 1
“gut” (good) = 2
“bestanden” (pass) = 3
“nicht bestanden” (failed) = 5.

Intermediate grades of 1.3 / 1.7 / 2.3 and 2.7 are also permitted.

(2) The final grade of the doctoral degree colloquium is calculated as the arithmetic average (not rounded) of the individually assigned grades. The colloquium is considered to have been passed if this final grade is 3.0 or better.

§ 12. Absence and repetition of the oral exam

(1) If the candidate is absent without justification on the date fixed for the doctoral degree colloquium, then the latter is considered to have been failed.

(2) In the event of a failing grade, the candidate is allowed to repeat the colloquium one time only; at least half a year must pass before the candidate applies to repeat the colloquium.

(3) If the candidate does not submit an application to repeat the doctoral degree colloquium within a period of a year, or if the candidate fails the repeat examination, then the candidate’s application for conferral of the doctoral degree is considered to have been rejected. The procedure is to be completed in accordance with § 16 (2). Justifiable exceptions to this policy may be made by the Promotionsausschuss.

§ 13. Overall grade for the doctoral degree

(1) The overall grade for a successful application for conferral of the doctoral degree is determined by the Examining Board immediately following the doctoral degree colloquium.
(2) The overall grade is based on the weighted average of the final dissertation grade calculated according to § 8 (8) (weighting factor of 2, even in the event of more than 2 referees) and the final grade of the doctoral degree colloquium calculated according to § 11 (weighting factor equal to 1). The overall grade for both academic components of the doctoral degree is calculated from this weighted average as follows:

<table>
<thead>
<tr>
<th>Weighted Average</th>
<th>Overall Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 1.5</td>
<td>&quot;sehr gut&quot; (very good)</td>
</tr>
<tr>
<td>from 1.5 up to (but not including) 2.5</td>
<td>&quot;gut&quot; (good)</td>
</tr>
<tr>
<td>from 2.5 up to 3.0 (inclusive)</td>
<td>&quot;bestanden&quot; (pass)</td>
</tr>
</tbody>
</table>

(3) In exceptional cases, the overall grade can be issued with the commendation “Mit Auszeichnung” (with Distinction), provided that the weighted average calculated in § 13 (2) is equal to 1.0 (not rounded) and at least one of the dissertation referees made a corresponding recommendation in his or her referee report. Furthermore, the commendation can be awarded only with explicit recommendation by the Examining Board.

(4) Following a successful doctoral degree colloquium, the examination procedure for conferral of the doctoral degree is to be completed according to the regulations of § 14; otherwise, the examination procedure is to be completed according to § 12. The Chairman of the Examining Board is to inform the candidate of the result immediately after conclusion of the colloquium.