

Doctoral Regulations 2023



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Doctoral Regulations

Delft University of Technology

For further information about these regulations, please
contact: The Graduate Office, TU Delft Graduate School
www.graduateschool.tudelft.nl

The Doctoral Regulations were established by the Board for Doctorates in its
meeting of 19 June 2023.

Prof. T.H.J.J. van der Hagen
Chair of the Board for Doctorates
Rector Magnificus of TU Delft

Foreword

Awarding the degree of Doctor is a great privilege for a Dutch university. It is one of the unique, distinctive and inalienable prerogatives of a university. It is the highest academic accolade we have in the Netherlands.

The doctoral research that leads to the doctoral dissertation is an exciting process during which the candidate blossoms into a fully-fledged researcher, capable of conducting and reporting independent scientific research in accordance with the principles of good academic practice: transparency, integrity and respect for third-party findings. The candidate is supervised during this process by (a) promotor(s) and/or copromotor(s). The ultimate defence of the doctoral dissertation in the presence of an independent committee consisting of scientists experienced in TU Delft decorum is one of the most striking moments in the academic career of the candidate and their supervisors.

All the more reason to go into the process that underpins the preparation and writing of the doctoral dissertation with due care and attention. To that end, the Doctoral Regulations and the Implementation Decree provide rules with which everyone involved in this process must comply. These new regulations contain various changes compared to the 2018 version, relating to English language skills, premature termination, the expansion of the four eyes principle, the composition of the team of supervisors and the doctoral committee and data management. In line with developments in society, the Doctoral Regulations and the Implementation Decree have been formulated using gender-neutral language.

The Board for Doctorates and the Graduate School of Delft University of Technology aim to ensure that our PhD candidates experience and benefit from a rich and informative development process, and can take pride in being awarded their doctorate by their promotors.

Kind regards,

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Rector Magnificus*

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Pro Vice Rector Magnificus for Doctoral Affairs*

Delft, September 2023

Table of Contents

1	Definitions.....	9
2	Doctorate.....	12
3	Joint doctorate.....	13
4	Start of doctoral programme.....	13
5	Doctoral candidate and preparation of the doctoral dissertation.....	14
6	Doctoral Education programme.....	15
7	Go/No Go and Go/No Go and Premature termination.....	15
8	Supervision of the doctoral candidate.....	17
9	Duties and responsibilities of promotor and copromotor.....	19
10	Approval of draft doctoral dissertation.....	20
11	Application for doctoral defence ceremony.....	21
12	Composition of doctoral committee.....	22
13	Appointment of doctoral committee and announcement of provisional doctoral defence date.....	23
14	Assessment of draft doctoral dissertation by doctoral committee.....	24
15	Preparations for the doctoral defence ceremony.....	25
16	Doctoral defence ceremony.....	26
17	Awarding of the degree of Doctor.....	27
18	Awarding of the degree of Doctor with designation cum laude.....	28
19	Disputes.....	30
20	Mediation.....	31
21	Honorary doctorate.....	31
22	Final provisions.....	32
23	Transitional provisions.....	33

Article 1 Definitions

1.1. The terms used in these Regulations are defined as follows:

Board for Doctorates:	the board for doctorates of the university within the meaning of Article 7.18 section 4 and Article 9.10 of the Act;
Copromotor:	the person appointed by the Board for Doctorates to work with the promotor in supervising the doctoral candidate;
DE Programme:	the Doctoral Education (DE) training programme that is compulsory for doctoral candidates;
Doctoral candidate:	the person registered as such at the TU Delft Graduate School and following a Doctoral Programme;
Doctoral committee:	the committee, appointed by the Board for Doctorates, before which the doctoral defence ceremony will take place;
Doctoral defence ceremony:	the public session of the doctoral committee in which the doctoral candidate defends the doctoral dissertation, including appendices and propositions, in order to be awarded the degree of Doctor;
Doctoral dissertation:	the scientific treatise as defined in Section 7.18, paragraph 2b of the WHW;
Doctoral Examination Working Committee:	the committee established as such by the Rector Magnificus, whose members deputise for the Rector Magnificus in his role as chairperson during the doctoral defence ceremony;

Doctoral Programme:	the period from the registered start of the doctoral research up to and including the doctoral defence ceremony;
Draft doctoral dissertation:	the draft for the doctoral dissertation that is submitted for assessment by the doctoral committee after being approved by the promotor;
Faculty Graduate School:	the Graduate School of a faculty as defined in Article 18a of the Executive and Management Regulations;
Go/No-Go meeting:	meeting at the end of the first year of the doctoral programme in which the intended promotor makes an assessment, based on a committee's recommendations, as to whether the doctoral candidate is considered capable of successfully completing the Doctoral Programme;
Graduate School Office:	support office of the TU Delft Graduate School responsible for day-to-day business concerning doctorates and which supports the TU Delft Graduate School;
Implementation Decree:	more specific rules concerning the implementation of the Doctoral Regulations, to be adopted by the Board for Doctorates;
Intended promotor:	full professor or staff member with a doctorate to whom the ius promovendi has been awarded who has reached agreement with the doctoral candidate on the subject of the doctoral research and who, once a Go decision has been made based on the Go/No Go meeting, requests that the Board for Doctorates appoint him as promotor;

Ius promovendi	the right to be eligible to be appointed as a promotor on the grounds of Section 7.18 of the WHW;
Promotor:	the full professor or staff member with a doctorate appointed as such by the Board for Doctorates in accordance with Section 7.18, paragraph 4 of the WHW to whom the ius promovendi has been awarded or whose ius promovendi has been recognized by the TU Delft Board for Doctorates;
Propositions:	statements argued and appended to the doctoral dissertation designated by the promotor as academically sound, examinable and defensible and which the doctoral candidate will defend;
Rector Magnificus:	the Rector Magnificus of the university, also chairperson of the Board for Doctorates, or the replacement of the Rector Magnificus during a doctoral defence ceremony;
TU Delft Graduate School:	the Graduate School of the university, as defined in Article 18a of TU Delft's Executive and Management Regulations, consisting of the faculty Graduate Schools and a board;
Vice-Rector:	the vice-chairperson of the Board for Doctorates, who also chairs the Doctoral Examination Working Committee;
WHW:	the Higher Education and Scientific Research Act of the Netherlands (Wet op het hoger onderwijs en wetenschappelijk onderzoek).

- 1.2. Any references in these Regulations to:
- a. promotor or copromotor should be interpreted as meaning promotors and/or copromotor in cases in which more than one promotor and/or copromotor have been appointed;
 - b. promotor or copromotor should also be interpreted as intended promotor or intended copromotor during the period before a Go decision has been made and the appointment as promotor has taken place;
 - c. full professor should also be interpreted as the former full professor acting as promotor.
- 1.3. The provisions included in these Regulations concerning the doctoral dissertation will also be applicable to the Doctoral Design (with appendices). This refers to the original, innovative technical design, comprising design drawings, models and/or other products developed by using appropriate specialist theoretical knowledge, methods and/or calculations, combined with scientific justification and documentation compiled in writing.

Article 2 **Doctorate**

- 2.1. The degree of Doctor can be obtained at TU Delft following the public defence of a doctoral dissertation before the Board for Doctorates or the doctoral committee appointed by it. The Board for Doctorates awards the degree of Doctor. By way of a departure from that stipulated in the other Articles in these Regulations, the provisions of Article 21 will apply to the awarding of the honorary doctoral degree.
- 2.2. Admission to the doctoral defence ceremony will be open to anyone:
- a. who has been awarded the degree of Master in accordance with Section 7.10 a, paragraph 1, 2 or 3 of the WHW, and
 - b. who, as proof of competence to practice science independently has written a doctoral dissertation, and
 - c. has met the other requirements set in these Doctoral Regulations with regard to, among other things:
 - completing a Doctoral programme,
 - following a DE programme and
 - the quality and content of the doctoral dissertation.

- 2.3. In exceptional circumstances, the Board for Doctorates can, on their request, admit access to the doctoral programme and the doctoral defence ceremony to a person who is not in possession of the required degree but who meets the requirements stipulated in Article 2.2b and c, if the person requesting this demonstrates sufficient knowledge in some other way, and to the satisfaction of the Board for Doctorates. The Board for Doctorates can determine more specific rules for this in the Implementation Decree.

Article 3 Joint Doctorate

- 3.1. TU Delft can, together with one or more Dutch or foreign institutions of academic education, jointly:
- a. award the degree of Doctor by issuing a single degree certificate;
 - b. award the degree of Doctor, with each of the institutions awarding the degree of Doctor including a reference to the fact that the degree is being awarded jointly.
- 3.2. The joint doctorate will be awarded by the Board for Doctorates, together with or in conjunction with a similar body at the partner institution.
- 3.3. The joint doctorate will meet the following requirements:
- a. a cooperation agreement has been concluded with the other institution in advance;
 - b. the Board for Doctorates has issued permission in writing prior to the Doctoral Programme;
 - c. the provisions of the Doctoral Regulations will apply to the joint doctorate, unless exceptions apply that have been substantiated and authorised by the Board for Doctorates.
- 3.4. In the Implementation Decree, the Board for Doctorates will determine more specific rules with regard to the conditions and requirements that a joint doctorate must always meet.

Article 4 Start of Doctoral Programme

- 4.1. A person who wishes to complete a Doctoral Programme in order to obtain a doctorate must:
- a. enter into consultations with the most appropriate full professor or the most appropriate staff member with a doctorate to whom the ius promovendi has been awarded in view of the field of science involved and reach agreement on the subject of the doctoral research, the title of the doctoral dissertation and the staff member's willingness to act as promotor,
and
 - b. provide proof of identity and register as a doctoral

candidate at the TU Delft Graduate School by submitting a certified copy of a degree certificate as defined in Article 2.2a or a copy of the awarding of access pursuant to Article 2.3 and

- c. provide proof of a good of spoken and written command of English.

4.2. When the conditions stipulated in 4.1 have been met, the TU Delft Graduate School will ensure that a statement is issued as soon as possible on behalf of the Board for Doctorates detailing the registration as a doctoral candidate and the appointment as intended promotor of the person referred to in 4.1a, and, if applicable, the appointment of an intended copromotor.

4.3. Within three months of the start of the Doctoral Programme, the doctoral candidate must have made agreements with the intended promotor on supervision, the appointment of one or two intended (co)promotor(s) as referred to in Article 8 and the content of the DE Programme to be followed by the doctoral candidate, and this must be recorded in a PhD agreement and submitted to the Faculty Graduate School.

Article 5 Doctoral candidate and preparation of doctoral dissertation

5.1. The doctoral candidate will conduct independent scientific research and will also maintain the customary academic contacts with fellow scientists.

5.2. The doctoral candidate is responsible for producing the doctoral dissertation as a contribution to science and for ensuring that the research is conducted:

- a. in accordance with the code of conduct and professional code that apply to professional activities in the area of science concerned;
- b. according to the statutory regulations and university regulations applicable, in all events, for research involving animal testing, hazardous (e.g. radioactive) materials, hazardous (e.g. biological) substances; and
- c. without the imposition of any limitations that conflict with academic freedom on the research and the freedom of publication of data and results from the research, also insofar as (part of) the research is funded by third parties.

Article 6 Doctoral Education Programme

- 6.1. The doctoral candidate is obliged to follow the DE Programme and complete it successfully and will receive a DE certificate for this. The doctoral candidate will register the planning and progress on the DE Programme in the system designated for this.
- 6.2. The DE Programme consists of the following course components: transferable, research-related and discipline-related skills. The Board for Doctorates will specify further requirements concerning the size/ scope of these course components.
- 6.3. In very exceptional cases, the Board for Doctorates can award exemption from taking a component or course in the DE Programme. A request to this effect must be submitted by the doctoral candidate within twelve months of the start of the Doctoral Programme to the director of the Faculty Graduate School.
- 6.4. In very exceptional cases, the Board for Doctorates can award full dispensation from taking the DE Programme. A request to this effect must be submitted by the doctoral candidate within four months of the start of the Doctoral Programme to the director of the Faculty Graduate School. The Board for Doctorates can specify further requirements concerning the maximum scope of the dispensation.

Article 7 Go/No Go and premature termination

- 7.1. At the latest one year after the registered start date of the Doctoral Programme, a Go/No Go meeting will be held between the doctoral candidate and the intended promotor following which the intended promotor will explicitly inform the doctoral candidate of the former's expectations concerning the successful completion of the Doctoral Programme within a reasonable time period. Based on this, the intended promotor will decide whether the Doctoral Programme will proceed (Go) or will be terminated (No Go).
- 7.2. If the doctoral candidate is working on the Doctoral Programme full-time, a period of four years from the start of the Doctoral Programme is deemed a reasonable time period.
- 7.3. In the decision referred to in paragraph 1, the intended promotor will take prior advice from a committee consisting of at least three members, including an independent full professor or assistant/associate professor holding a doctorate. This independent member is not involved in the doctoral research, is from outside the promotor's research group and preferably work

outside the promotor's department. Close family members with an affinity up to and including the fourth degree or other persons who have such a relationship to the doctoral candidate that they cannot make an independent judgement will not be eligible to act as members of this committee.

- 7.4. If the intended promotor reaches a Go decision, as a result of which the Doctoral Programme can proceed, the intended promotor will, within two weeks of the decision, request that the faculty Graduate School formally register the doctoral candidate with the Board for Doctorates for further admission to the Doctoral Programme. At the same time, the intended promotor will ask to be appointed as a promotor by the Board for Doctorates and also ask them to appoint any copromotor.
- 7.5. Within four weeks of the requests referred to in the previous paragraph, the Board for Doctorates will notify the doctoral candidate whether the doctoral candidate has been formally admitted to the Doctoral Programme and of the appointment of the promotor and any copromotor, who will also be notified of this.
- 7.6. If the intended promotor reaches a No-Go decision, the Doctoral Programme will end for the doctoral candidate and the doctoral candidate's registration at TU Delft will be terminated.
- 7.7. In addition to a termination of the Doctoral Programme as referred to in paragraph 6 of this article, the Doctoral Programme will end and the doctoral candidate's registration at TU Delft will be terminated:
 - through termination by the doctoral candidate;
 - through termination by the Board for Doctorates.
- 7.8. If the doctoral candidate wishes to terminate the Doctoral Programme, the doctoral candidate will inform the Board for Doctorates in writing, stating the reasons. The Board for Doctorates can ask the doctoral candidate, the director of the Faculty Graduate School involved and/or the (co)promotor for a clarification.
- 7.9. The Board for Doctorates can proceed to terminate the Doctoral Programme if:
 - a. the doctoral candidate does not fulfil interim agreements with the promotor after being repeatedly summoned to do so in writing;
 - b. it repeatedly appears, from interim progress evaluations, that the doctoral candidate is not making such progress that the doctoral candidate is expected by the promotor to be able to submit a (draft) doctoral dissertation which meets the requirements set by the promotor on the grounds of the latter's responsibility for the doctoral dissertation as a basis for the promotion;

- c. the doctoral candidate has not, during a period of at least six months, responded to repeated requests by the promotor for detailed consultation about the content and progress of the (draft) doctoral dissertation;
- d. the Board for Doctorates decides not to appoint another promotor as referred to in Article 10 paragraph 6;
- e. the Board for Doctorates, acting on a proposal by the director of the Faculty Graduate School involved or otherwise, deems that it cannot reasonably be demanded of the TU Delft to continue with the Doctoral Programme.

The termination by the Board for Doctorates will take place in writing, stating reasons.

Article 8 Supervision of the doctoral candidate

- 8.1. A doctoral candidate is supervised, in any event, by a promotor and one or two (co)promotor(s). If the doctorate involves collaboration with another university or knowledge institution, a fourth (co)promotor will be appointed.
- 8.2. The Board for Doctorates appoints one or more TU Delft full professors or staff members with a doctorate who have been awarded the *ius promovendi* as promotor. The third (co)promotor can be replaced by an external adviser. At least one of the promotors must have an employment contract with TU Delft and be sufficiently available for the performance of the duties and responsibilities of a promotor. In addition to the promotor(s) referred to above, a promotor from another Dutch or foreign institution for higher education and research can be appointed, provided that said promotor has the *ius promovendi* from that institution. In the event that the doctorate involves collaboration with another university and four (co)promotor(s) are appointed, a maximum of two of the (co)promotor(s) must have an employment contract with TU Delft.
- 8.3. Close family members with an affinity up to and including the fourth degree or other persons who have such a relationship to the doctoral candidate that they cannot reasonably be expected to make an independent judgement on the doctoral candidate will not be eligible to act as promotor or copromotor.
- 8.4. A full professor or associate professor given an honourable discharge will, until five years after being discharged, retain the right to act as promotor with regard to the doctoral candidate for whom the full professor or associate professor who has been given an honourable discharge was appointed as promotor by the Board for Doctorates, on condition that the Board for Doctorates agrees to the continuation of the promotorship. In such cases, the Board for

Doctorates can determine that an additional (co)promotor be appointed from the academic staff.

- 8.5. At the promotor's request the Board for Doctorates can appoint a copromotor and an external adviser instead of a third copromotor. The copromotor appointed must be an employee at TU Delft or an institute of higher education with which TU Delft as an institution has a cooperation agreement. Anyone who has been awarded a doctorate, is a member of the academic staff, has specific expertise in the scientific area to which the doctoral dissertation relates and does not have the *ius promovendi* can be appointed as copromotor. Anyone who is an expert in the scientific area of the doctoral dissertation, or a part thereof, can be appointed as an external adviser. The appointed copromotor and the external adviser appointed as necessary must also be involved in the daily supervision of the doctoral candidate.
- 8.6. If there are several intended promotors or copromotors, they will appoint one of their number as coordinator who will be responsible for communication with the doctoral candidate, the faculty and University Graduate School, the Board for Doctorates and other parties involved, such as fellow promotors and copromotors and insofar as it concerns issues relating to the Doctoral Regulations. In that case, the term promotor in these Regulations should be interpreted as 'corresponding promotor'. In the event of a difference of opinion between the various promotors (or intended promotors), the Board for Doctorates will act as it sees fit in the matter.
- 8.7. The Board for Doctorates will appoint the promotor and possibly also the copromotor and the external adviser after a Go decision (to proceed with the Doctoral Programme), as stipulated in Article 7, has been made.
- 8.8. The Board for Doctorates may decide not to appoint the (co)promotor or external adviser, or to remove an appointed (co)promotor or external adviser from their positions in the event of serious neglect of their duties and responsibilities. Prior to the decision referred to, the Board will give the (co)promotor or external adviser involved the opportunity to present their case. At the request of a (co)promotor, the Board for Doctorates can also remove a (co)promotor or external adviser from their positions.

Article 9

Duties and responsibilities of promotor and copromotor

- 9.1. The promotor is responsible for supervising the doctoral candidate throughout the entire Doctoral Programme and in the preparation of the doctoral dissertation. There will be regular consultations between the promotor and the doctoral candidate. The supervision provided will aim to ensure that:
- a. the research is conducted in accordance with Article 5;
 - b. the draft doctoral dissertation is submitted and approved within a reasonable time period after the start of the doctoral research;
 - c. the doctoral candidate develops to become a fully-fledged scientific researcher;
 - d. the doctoral candidate follows and successfully completes the DE Programme;
 - e. the progress of the doctoral candidate is regularly discussed and the resulting agreements are set down in writing in a system designated for this and submitted to the Faculty Graduate School.
- 9.2. If a copromotor has been appointed, the duties and authority described in these Regulations will be exercised jointly by the promotor and copromotor as far as is possible. In that case, the use of the term promotor in these Regulations will also include the copromotor where applicable.
- 9.3. The promotor will assess the draft doctoral dissertation in accordance with the requirements the promotor sets as the basis for awarding the doctorate on the grounds of the promotor's responsibility for the doctoral dissertation. In assessing the draft doctoral dissertation, the promotor will take account of the following factors:
- a. the relevance of the subject;
 - b. the importance of the problem definition and its precise formulation;
 - c. the originality of its treatment;
 - d. the scientific nature of the research: organisation, analysis, processing of materials and synthesis;
 - e. the presence of creative suggestions with regard to the area of science treated in the doctoral dissertation;
 - f. a critical confrontation of the candidate's conclusions with existing theories or views;
 - g. a balanced structure in the doctoral dissertation; clarity of style, correct and appropriate use of language;

- h. the absence of anything at odds with public order or decency;
 - i. the absence of plagiarism, and
 - j. the other provisions stipulated in Article 5.2.
- 9.4. In consultation with the doctoral candidate and other persons involved in preparing the draft doctoral dissertation, the promotor can propose changes and/or additions.
- 9.5. The promotor
- notifies the Board for Doctorates in writing that the draft doctoral dissertation has been approved;
 - attaches the approval to the propositions;
 - submits a proposal for composition of a doctoral committee;
 - after receipt of the judgement of the doctoral committee, provides written notification of the approval of the definitive doctoral dissertation and;
 - makes the necessary preparations for the doctoral defence ceremony in accordance with the Doctoral Regulations and the Implementation Decree.

Article 10 Approval of draft doctoral dissertation

- 10.1. At the request of the doctoral candidate for the approval of the draft doctoral dissertation, the promotor will decide if the doctoral candidate has met the requirements stated in these regulations.
- 10.2. If more than one promotor and/or copromotor have been appointed, the draft doctoral dissertation will be approved in mutual consultation between them. If this results in agreement, the promotor will provide written notification of this to the Board for Doctorates, sending a copy to the doctoral candidate.
- 10.3. If this consultation does not result in agreement, each promotor will notify the Board for Doctorates, also sending a copy to the doctoral candidate, of each promotor's substantiated judgement, after which the Board for Doctorates will take appropriate action.
- 10.4. Within two months of receipt of the draft doctoral dissertation, the promotor will decide to approve or not to approve it, unless the doctoral candidate agrees to a longer time period for the decision. If this time period is exceeded, the doctoral candidate can request that the Board for Doctorates impose a specific deadline by which the promotor must reach a decision concerning approval. The Board for Doctorates will decide on this within a week of receiving the request.

- 10.5. In the event of a refusal to approve the draft doctoral dissertation, the Board for Doctorates can, at the request of the doctoral candidate and after allowing the latter and the promotor the opportunity to present their cases, relieve the promotor from the respective promoter duties. If it judges that the doctoral programme can still proceed, with amendments to the draft doctoral dissertation, the Board for Doctorates will appoint an alternative promotor, unless it judges that a new appointment is not necessary, which may be the case if several promotors have been appointed. The appointment of an alternative promotor will only take place after the dean of the faculty concerned has been given the opportunity to offer advice.
- 10.6. If, in the situation described in the previous paragraph, the Board for Doctorates judges that the Doctoral Programme cannot proceed even with amendments to the draft doctoral dissertation because its quality is insufficient, it will not appoint an alternative promotor.

Article 11 Application for doctoral defence ceremony

- 11.1. After the draft doctoral dissertation has been approved by the promotor and the doctoral candidate has successfully completed the DE Programme, or been awarded full dispensation from it, the doctoral candidate can apply for the doctoral defence ceremony. For this purpose, the doctoral candidate must, with the approval of the promotor, submit a request for a provisional defence ceremony date.
- 11.2. The following must be appended to this request:
- a. the definitive title of the doctoral dissertation and a digital copy of the draft doctoral dissertation with propositions;
 - b. a written statement from the promotor confirming that the promotor has approved the draft doctoral dissertation, that it is free of plagiarism and that all relevant research data/code on which the doctoral dissertation is based are FAIR (Findable, Accessible, Interoperable and Reusable) by sharing them in a research data repository.

Article 12 Composition of Doctoral Committee

- 12.1. A doctoral committee consists of at least six and at most eight members and is composed as follows:
 - a. the Rector Magnificus or a member of the Doctoral Examination Working Committee as chairperson;
 - b. the promotor;
 - c. at least four independent members, as described in 12.2;
 - d. possibly one or two extra (co)promotor(s);
 - e. possibly another extra member, which also includes an external adviser as referred to in Article 8 of these Regulations.
- 12.2. All members have the task of assessing the doctoral dissertation and the propositions and acting as examiners during the doctoral defence ceremony. An independent member is not involved in the preparation of the doctoral dissertation. An independent member must be capable of reaching an independent judgement of the quality of the doctoral dissertation and the doctoral candidate without having any personal interest in this judgement and that of the other members of the doctoral committee.
- 12.3. The members must be experts in the area of science of the doctoral dissertation or part of it. This requirement does not apply to the chairperson.
- 12.4. Close family members with an affinity up to and including the fourth degree or other persons who have such a relationship to the doctoral candidate that they cannot make an independent judgement will not be eligible to act as members of the doctoral committee.
- 12.5. At least three independent members will have ius promovendi at a Dutch or foreign university, of whom at least one must be employed at TU Delft as full professor and at least one at an institute for higher education other than TU Delft.
- 12.6. The other members will be holders of a doctorate. The Board for Doctorates may depart from this in response to a substantiated request from the promotor.
- 12.7. If the doctoral committee includes only one independent member who is employed at TU Delft as full professor, a TU Delft full professor must be added to the committee as a reserve member. If the doctoral committee consists of four independent members, a reserve member must be added to the committee, which reserve member does not have to be a full professor at TU Delft if the

committee already has two independent members who have been appointed full professors at TU Delft. The reserve member must be available on-call until ten minutes before the time of the doctoral defence ceremony and will only be part of the committee if the aforementioned independent member is unable to take part in the doctoral defence ceremony. The reserve member is exempt from the assessment of the doctoral dissertation and the propositions, but must be sufficiently familiar with the doctoral dissertation and the propositions to act as an examiner.

Article 13 Appointment of Doctoral Committee and announcement of provisional doctoral defence date

- 13.1. At the latest twelve weeks before the provisional defence ceremony date, the promotor will submit a written and substantiated proposal for the composition of the doctoral committee once the promotor is convinced that the members will accept the appointment and will be present at the doctoral defence ceremony on the provisional defence ceremony date. This proposal will include relevant details concerning the proposed members, with a reference to the judgement about their independence referred to in Article 12.2.
- 13.2. Within one week after receipt of the proposal, the Board for Doctorates will make a decision on the appointment of members of the doctoral committee and send written notification concerning that decision to the promotor, the doctoral candidate and the members of the doctoral committee.
- 13.3. If the Board for Doctorates does not agree to the composition of the doctoral committee proposed by the promotor, it will request a new proposal on this from the promotor. The Board for Doctorates reserves the right to appoint members to the doctoral committee itself.
- 13.4. The members of the doctoral committee will confirm whether or not they agree to their appointment as soon as possible to the Board for Doctorates and the promotor, at the latest within two weeks of their appointment.
- 13.5. Once the members of the doctoral committee have confirmed their presence and availability, the provisional doctoral defence date is announced.

Article 14 Assessment of draft doctoral dissertation by doctoral committee

- 14.1. At the latest in the eleventh week before the provisional defence date, the Graduate School Office will send each of the proposed members of the doctoral committee and the Board for Doctorates a copy of the draft doctoral dissertation.
- 14.2. Within six weeks of their appointment, the doctoral committee members will report in writing, with a copy to the promotor, to the Board for Doctorates on their judgement concerning whether the draft doctoral dissertation appears to show sufficient evidence that the doctoral candidate is capable of independently practising science and whether the doctoral candidate can be admitted to the doctoral defence ceremony. The promotor ensures that the doctoral committee members communicate their judgement to the Board for Doctorates in good time.
- 14.3. Doctoral committee members can vote on admission to the doctoral defence ceremony as follows:
 - A. Approval without reservation: the member considers written comments to be unnecessary or advises stylistic/textual improvements that have no impact on the conclusions but aim to improve readability;
 - B. Approval with reservation: the member is of the opinion that essential corrections need to be made to the doctoral dissertation before approval can be given for admission and gives detailed indications of these to the doctoral candidate and the promotor within four weeks of **the member's** appointment to the committee and notifies the Board for Doctorates about this;
 - C. No approval: the member does not consider the doctoral dissertation to be of sufficient academic quality and level and is of the opinion that the doctoral candidate cannot be admitted to the doctoral defence ceremony. The member may also indicate that a revised version of the draft doctoral dissertation can be submitted after serious substantive conditions have been met.
- 14.4. The result of the vote referred to in paragraph 3 is 'postponement of the doctoral defence ceremony' if at least:
 - a. two members vote according to 14.3 C,
 - b. one member votes according to 14.3 C and two according to 14.3 B, or Article 14.3.B, or
 - c. three members vote according to 14.3 B.

- 14.5. If the vote of the members of the doctoral committee shows that the doctoral candidate can be admitted to the doctoral defence ceremony, the doctoral candidate and the promotor, if applicable, must take the written comments referred to in paragraph 3 into account in the definitive version of the doctoral dissertation. On the basis of the written comments of a committee member, the Board for Doctorates can decide to contact the promotor to ascertain whether these comments are being taken into account in the definitive version of the doctoral dissertation.
- 14.6. If the result of the vote is 'postponement of the doctoral defence ceremony', the Board for Doctorates will give the promotor an opportunity to present a counterargument. The Board for Doctorates will urge the promotor to take account of the committee's objections in a new draft doctoral dissertation. If the promotor, following consultation with the doctoral candidate, agrees to a new draft doctoral dissertation being prepared and to the postponement, a new defence ceremony date will be agreed on, after the revised draft doctoral dissertation has been approved. The revised draft doctoral dissertation will be resubmitted to the doctoral committee, who will again assess it and vote on it in accordance with this Article.
- 14.7. If the involvement of the Rector Magnificus referred to in paragraph 6 does not result in agreement with the promotor, the Board for Doctorates will decide on the postponement of the doctoral defence ceremony. Based on its findings, the Board for Doctorates can refuse to hold the doctoral defence ceremony if it does not have confidence that its postponement will result in improved quality of the doctoral dissertation. In that case, the doctoral committee will be disbanded and the Board for Doctorates will then act according to the relevant circumstances.

Article 15 Preparations for the doctoral defence ceremony

- 15.1. After the promotor has approved the definitive doctoral dissertation, and has notified the Board for Doctorates about this, the date and time of the doctoral defence ceremony are set definitively on behalf of the Board for Doctorates.
- 15.2. The Graduate School Office will ensure that the doctoral defence ceremony is announced at least one week before the set date. The Graduate School Office will ensure that the

doctoral candidate is aware of the doctoral defence ceremony protocol at least two weeks before the doctoral defence ceremony. Two weeks before the doctoral defence ceremony at the latest, the doctoral candidate will contact the chairperson of the doctoral committee and make an appointment with the chairperson. If desired, the doctoral candidate will also make an appointment with the other members of the doctoral committee.

- 15.3. If persons who are not members of the doctoral committee wish to examine the candidate, a written request to this effect must be submitted at the latest two weeks before the provisional defence ceremony date to the Board for Doctorates, which will make a decision on whether to honour the request within one week. An examiner of this type must hold a doctorate or be authorised to act as a promotor.

Article 16 **Doctoral defence ceremony**

- 16.1. The doctoral defence ceremony takes place in public before the Board for Doctorates or a doctoral committee established by it. The doctoral defence ceremony is chaired by the Rector Magnificus, a member of the Doctoral Examination Working Committee or a member of the Board for Doctorates. The doctoral committee convenes for a closed meeting before the public defence. In the case of exceptional circumstances or on the basis of a substantial request by the doctoral candidate, the Board for Doctorates can decide to hold a fully or partially closed doctoral defence ceremony.

Such a request must be submitted two weeks before the doctoral defence ceremony, if possible.

- 16.2. The doctoral candidate will spend one hour defending the doctoral dissertation and the propositions in the face of the reservations of the doctoral committee, as well as anyone given permission in accordance with Article 15.3. During the defence of the doctoral dissertation and the propositions, the doctoral candidate can be assisted by one or two paronymphs (supporters).
- 16.3. After the defence, the session will be adjourned for deliberations by the doctoral committee.
- 16.4. If permission is obtained in advance from the Board for Doctorates, it is possible for the doctoral defence ceremony to

take place partially in digital form, whereby members of the doctoral committee will participate via a secure video connection provided by the Board for Doctorates. In exceptional cases it may be permitted for the doctoral candidate (also) to take part in the session by digital means. The chairperson and at least one promotor from the doctoral committee are always physically present at the session. The chairperson determines the procedure during a hybrid session.

Article 17 Awarding of the degree of Doctor

17.1. The decision on the awarding of the degree of Doctor will be taken in a closed meeting of the doctoral committee immediately after the adjournment of the doctoral defence ceremony. The chairperson will ask the members for their judgement on the defence in particular and will also take into account the quality of the doctoral dissertation and propositions. If at least one member of the doctoral committee demands it, a roll call vote will be held on the proposal to award the degree of Doctor. In this context, the committee members vote for or against awarding, or abstain. The degree of Doctor is not awarded if at least:

- a. two members vote against;
- b. one member votes against and two members abstain;
- c. three members abstain.

In appropriate cases, the chairperson can issue a written report on the closed meeting to the Board for Doctorates.

17.2. If the degree of Doctor is awarded, the chairperson of the doctoral committee and the promotor (and where applicable also the copromotor) will sign the certificate. When the doctoral defence ceremony is reconvened, the chairperson will inform the doctoral candidate that the doctoral committee has decided on behalf of the Board for Doctorates to award the doctoral degree.

If the designation cum laude is also to be attached to the doctorate, this will also be announced. The chairperson will explicitly draw the attention of the Doctor to the scientific integrity associated with obtaining a doctorate.

17.3. In the event that the degree of Doctor is not awarded after the vote referred to in paragraph 1,

- a. the chairperson will inform the doctoral candidate of this during the meeting referred to in paragraph 1,
- b. after reconvening the doctoral defence ceremony, the chairperson will announce that the awarding of the degree of Doctor is to be postponed and will then close the session, and

- c. the chairperson will provide notification of the decision made by the doctoral committee in writing to the Rector Magnificus who will then convene a special session of the doctoral committee, together with the Board for Doctorates.
- 17.4. The result of the session referred to in paragraph 3 c can either be that the doctoral candidate is readmitted to defend the doctoral dissertation and propositions or that the degree of Doctor is not awarded. The Rector Magnificus will inform the doctoral candidate of this decision in writing, together with the reasons for it.
- 17.5. Candidates who are awarded the degree of Doctor receive the certificate referred to in paragraph 2. The form and content of the certificate is established by the Board for Doctorates. If the designation cum laude referred to in Article 18 is awarded, this is indicated on the certificate.
- 17.6. On request, the Board for Doctorates will issue a replacement certificate to the owner of the certificate referred to in paragraph 2 in connection with a change to the name of the person in question as a consequence of the application of Articles 4, fourth paragraph, 7, first paragraph, or 28b second paragraph of Book 1 of the Dutch Civil Code. The replacement certificate will contain no other changes to the original relevant details. The replacement certificate is to be issued after proof of identity has been provided and subject to the condition that the original certificate is handed in to the TU Delft Graduate School Office.

Article 18 Awarding of the degree of Doctor with designation cum laude

- 18.1. If the promotor or another member of the doctoral committee is of the opinion that the doctoral dissertation shows evidence of exceptional competence on the part of the doctoral candidate to practice science independently, the promotor or another member of the doctoral committee can submit a proposal in writing, including full substantiation, for the awarding of the degree of Doctor with designation cum laude. A proposal of this kind can only be submitted after the promotor has agreed to it. The proposal will be accompanied by a recent curriculum vitae of the doctoral candidate and at least two letters of recommendation from leading external experts in the area of science concerned, who are not members of the doctoral committee. These experts are not close family members with an affinity up to and including the fourth degree or have such a relationship to the doctoral candidate that they cannot make an independent judgement about the doctoral candidate.

- 18.2. The following criteria apply to the awarding of the designation cum laude:
- a. the doctoral research conducted is pioneering and innovative;
 - b. the candidate has reached the result independently;
 - c. the doctoral dissertation was completed within a reasonable period of time;
 - d. the candidate's publications and appearances in the scientific community have made an impression on leading colleagues;
 - e. the candidate has preferably also demonstrated the implications of the research for technology and science.

The doctoral committee can also take into account publications or other evidence of outstanding scientific quality.

- 18.3. The proposal referred to in paragraph 1 must be in the possession of the Rector Magnificus at the latest five weeks before the agreed defence ceremony date. The Rector Magnificus will assess whether the nomination meets the procedural criteria. If the proposal is declared admissible, the Rector Magnificus will notify the other members of the doctoral committee and issue them with copies of the proposal and the referees' letters. If the proposal is not sufficiently substantiated to enable a decision to be taken, the Rector Magnificus will contact the promotor. The proposal may be rewritten and enhanced, after which the Rector Magnificus will make a decision on the application. If the proposal is rejected, the applicant and the chairperson of the doctoral committee are notified to this effect.

The proposal as well as the referees' letters must be handled strictly confidentially at all times and only made known to members of the doctoral committee.

- 18.4. If a proposal to award the degree of Doctor with designation cum laude has been made and there are no objections from the Board for Doctorates, the doctoral committee will include it in its deliberations prior to the doctoral defence ceremony.
- 18.5. Deliberations will be held on the proposal to award the degree of Doctor with designation cum laude during the meeting referred to in Article 17.1. This will involve: the proposal, the content of the doctoral dissertation and the propositions and their defence, the criteria for the awarding of the designation cum laude and the letters of recommendation.

- 18.6. After the deliberations referred to in Article 17.1, all members of the doctoral committee will vote anonymously and in writing on the proposal to award the degree of Doctor with designation cum laude and the decision on the awarding of it will be made. The following voting protocol applies. The proposal will be rejected if at least:
- a. two members vote against;
 - b. one member votes against and two members abstain;
 - c. three members abstain.

Article 19 Disputes

- 19.1. For these Regulations, a dispute is interpreted to mean an objection to a decision by or on behalf of the Board for Doctorates within the meaning of the General Administrative Law Act (Algemene wet bestuursrecht) or a complaint against the conduct of a doctoral candidate, promotor, copromotor, doctoral committee member or another person involved in the Doctoral Programme. The handling of a dispute will be subject to the General Administrative Law Act (Algemene wet bestuursrecht). A dispute concerning the legal status of a doctoral candidate with an appointment is not included in this definition of dispute.
- 19.2. An interested party can lodge an objection with the Board for Doctorates to a decision by or on behalf of the Board for Doctorates within six weeks of being informed of the decision.
- 19.3. An independent committee appointed by the Board for Doctorates will give advice on the objection. The Implementation Decree will include further details of the composition and working methods of the committee.
- 19.4. The committee will give the parties involved the opportunity to present their cases and will be entitled to elicit information that is necessary for it to exercise its duty responsibly.
- 19.5. Within six weeks of the objection being lodged, the committee will issue written advice to the Board for Doctorates together with a report of the hearings.
- 19.6. The Board will make a decision on the objection with due observance of the time periods specified in the General Administrative Law Act.
- 19.7. The provisions of paragraphs 2 to 6 will apply mutatis mutandis to the handling of a complaint as defined in the first paragraph.

Article 20 Mediation

- 20.1. Before a dispute can be handled, the Board for Doctorates must submit the dispute for mediation to the director of the Faculty Graduate School or to another person appointed for this purpose by the Board for Doctorates. The mediator will investigate whether an amicable settlement of the dispute is possible and will hold hearings with the parties involved in the dispute for this purpose.
- 20.2. If the mediation does not result in agreement within four weeks, the person who raised the dispute can request, within two weeks after completion of the mediation, that the Board for Doctorates handle the dispute. With the consent of the person who raised the dispute, the deadlines in Articles 19.5 and 19.6 will be extended to take account of the mediation.
- 20.3. An interested party can turn to the director of the Faculty Graduate School directly for mediation in a dispute. Paragraph 1, sentence 2 and paragraph 2, sentence 1 apply in this case. The time period for submitting a dispute to the Board for Doctorates will, by way of departure from Article 19.2, begin after the interested party has been notified of the result of mediation.
- 20.4. This article does not apply to an objection by a doctoral candidate to a No-Go decision by the intended promotor, referred to in Article 7.6.
- 20.5. The provisions of paragraphs 1 to 3 of this Article will apply mutatis mutandis to the handling of a complaint as defined in the first paragraph of Article 19.1.

Article 21 Honorary doctorate

- 21.1. Following nomination by a dean or the Executive Board, the Board for Doctorates has the power to award an honorary doctorate to:
 - a. a person who has conducted research that has been shown to be of exceptional significance to the practice of science at the university or for science in general, and that of TU Delft in particular;
 - b. a person who, from a scientific, cultural or societal perspective, has either directly or indirectly contributed exceptionally to academic education and research.
- 21.2. If the Board for Doctorates intends to approve a nomination by a dean to award an honorary doctorate, the Executive Board will be invited to present its views on this nomination in confidence. After taking cognisance of the Executive Board's position, the Board for

Doctorates will make a decision on the awarding of the honorary doctorate.

- 21.3. If the Board for Doctorates decides to award an honorary doctorate, it will also appoint one or more TU Delft full professors as promotor. Confidential notification of the decision will be made to the doctoral candidate, the promotor and the dean of the faculty involved. The decision will not be made public until the doctoral candidate has declared a willingness to accept the honorary doctorate.
- 21.4. The awarding of the honorary doctorate will take place in a public, special session of the Board for Doctorates. On behalf of the Rector Magnificus, the promotor will confer the dignity awarded on the honorary doctoral candidate, while expressing words of praise and appreciation. As proof of the dignity awarded, the honorary Doctor will be presented with a shoulder cape and a certificate signed by the Rector Magnificus.

Article 22 Final provisions

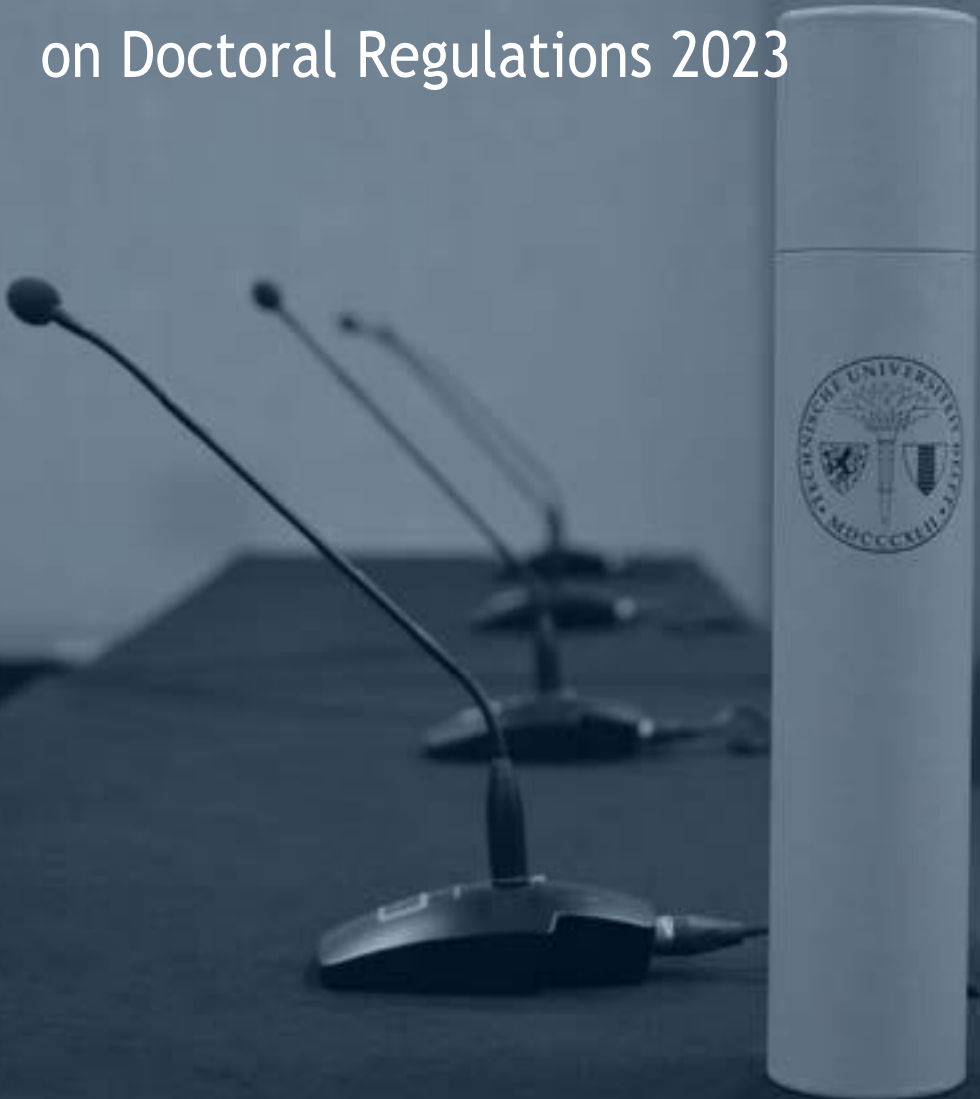
- 22.1. The Board for Doctorates can determine more specific rules in the Implementation Decree, including rules concerning the following:
 - a. admission to the doctoral defence ceremony in exceptional cases (Article 2.3);
 - b. the joint doctorate (Article 2.4);
 - c. the requirements for and the form of the doctoral dissertation;
 - d. the requirements for and the form of the propositions;
 - e. the procedure for the doctoral conferral ceremony and the defence;
 - f. the settlement of disputes;
 - g. continuation of promotorship after the honourable discharge of a full professor.
- 22.2. The Board for Doctorates may prescribe (digital) forms that must be used by the parties involved in the acts included in these Regulations.
- 22.3. In cases not covered in these Doctoral Regulations, or if any Article is susceptible to multiple interpretations, the Board for Doctorates will decide.
- 22.4. Anyone who wishes to be exempted from a provision in the Doctoral Regulations must submit a written and substantiated request to that effect to the Board for Doctorates, which will reach a decision on it within 30 days.
- 22.5. In exceptional cases, the Board for Doctorates can allow substantiated departures from that stipulated in these Regulations..

Article 23 Transitional provisions

Decisions that precede the entry into force of these Regulations, or any amendments to it, made concerning the appointment of the promotor and copromotor, the composition of the doctoral committee or exemptions from or amendments to that stipulated in these Regulations will remain in full force.



Implementation decree on Doctoral Regulations 2023



Implementation decree

on Doctoral Regulations 2023

Implementation decree on Doctoral Regulations

This implementation decree clarifies a number of articles of the TU Delft Doctoral Regulations 2023 and provides guidelines on protocol and practice for their implementation and enforcement, as mentioned in Article 22 and other articles of the Doctoral Regulations, accepted by the Board for Doctorates on 19 June 2023.

Table of Contents

- A. Admission to the doctoral defence ceremony in exceptional cases (Article 2.3 Doctoral Regulations) 5
- B. Joint doctorate (Article 3 Doctoral Regulations).....6
- C. Further explanation of Doctoral Education Programme (Article 6 Doctoral Regulations) 9
- D. Requirements and format of doctoral dissertation (Articles 5 and 9.3 Doctoral Regulations).....10
- E. Requirements for the propositions (Article 9.5 Doctoral Regulations) 17
- F. Preparation for and procedures during the doctoral defence ceremony and the awarding of the degree of doctor (Articles 15, 16, 17 and 18 Doctoral Regulations) 18
- G. Disputes Advisory Committee (Article 19.3 Doctoral Regulations) 25
- H. Continuation of promotorship after the honourable discharge of a full professor (Article 8.4 Doctoral Regulations).....26

Appendices:

- I: Further remarks on the propositions.....27
- II. Certificate..... 29
- III: Timeline for final phase of Doctoral Programme 30

A. Admission to the doctoral defence ceremony in exceptional cases (Article 2.3 Doctoral Regulations)

1. Any individual who does not meet the educational requirements specified in Article 2.2 paragraph a of the TU Delft Doctoral Regulations may submit a request to the Board for Doctorates to gain admission to the doctoral defence ceremony:
 - a. if the individual can provide proof of possession of a diploma that is comparable to the Dutch Master level;
 - b. If 1.a does not apply: on the basis of a reasoned recommendation from the intended promotor for exemption from these requirements.

2.
 - a. The applicant must submit the following, in the context of the assessment of Article 1.a:
 - a certified copy of the highest-level certificate of education obtained by the applicant;
 - the transcript of records pertaining to these certificates;
 - if the certificate and the transcript of records are not written in Dutch, English, French or German, certified translations of these documents into Dutch or English should also be included;
 - a curriculum vitae;

 - b. In the context of assessment of the request on the basis of article 1.b, and before submission of the documents referred to in paragraph a of this article, the applicant must submit a reasoned recommendation by the promotor explaining why the candidate should be admitted to the doctoral programme. Existing expertise and relevant work experience in the field should also be described in detail.

 - c. The request described in paragraph b of this article must be submitted to the Faculty Graduate School director. If the director approves, said director will submit the request together with any recommendations to the Board for Doctorates.

 - d. The Board for Doctorates will decide on the basis of the documents submitted whether the applicant will be allowed to start the doctoral programme. The Board for Doctorates may impose additional requirements for the Doctoral Education Programme to be followed by the candidate.

 - e. The Graduate School Office notifies the intended promotor and the candidate as quickly as possible regarding the decision taken.

B. Joint doctorate (Article 3 Doctoral Regulations)

1. The following criteria are used in the evaluation by the Board for Doctorates (although others may be added) in addition to the academic criteria that apply to every doctorate:
 - a. the strategic importance to TU Delft of the collaboration;
 - b. the reputation (ranking) of the partner institution;
 - c. the practicability of cooperation;
 - d. the financial consequences resulting from the cooperation.

2. The following variants are possible for joint doctorates:
 - a. **A joint doctorate degree leading to one coherent diploma per institution**

A joint doctorate leading to one coherent (dual) diploma from each institution, as defined in article 3.1.b of the Doctorate Regulations, is possible under the following conditions:

 - There is a long-term collaboration between the partner institutions (guideline: minimum duration of 10 years), as evidenced by a cooperation agreement between them, in accordance with the model given in the 'Guidelines for drawing up agreements for joint doctoral supervision' (hereinafter: Guidelines);
 - Several doctoral candidates should be involved in this collaboration under the supervision of both institutions and for whom both have a shared responsibility (guideline: at least 10 doctoral candidates);
 - For the joint responsibility of providing supervision to the doctoral candidate, an agreement will be made regarding the mutually applicable quality standards for the Doctoral Programme and the doctoral dissertation in accordance with the model set out in the Guidelines. This agreement is signed by the Rector Magnificus, as chairperson of the Board for Doctorates;
 - Agreements are made for the joint doctoral research and Doctoral Education between the partner institutions, the promotors and the candidate in accordance with the model set out in the Guidelines. A copy of this agreement must be submitted to the Faculty Graduate School within 3 months of commencement of the doctoral research.
 - b. **One diploma**

A joint doctorate leading to one (joint) diploma, as defined in Article 3.1.a of the Doctorate Regulations, is possible only in exceptional cases. The explicit permission of the Board for Doctorates is required for this, which must consult in advance with the Executive Board on this matter.

3. The stipulations in the Doctoral Regulations will apply to the joint doctorate, unless a departure from these stipulations is authorised by the Board for Doctorates. Regulations and additional requirements can only be deviated from in exceptional circumstances:
 - a. Successful completion of the DE programme (Article 6 Doctoral Regulations);
 - b. The composition of the doctoral committee (Article 12 Doctoral Regulations). Additional requirement, replacing Article 12.5 of the Doctoral Regulations: At least three independent members will have ius promovendi at a Dutch or foreign university, of whom at least one must be employed at TU Delft or at the partner institution as a full professor and at least one at an institute for higher education other than TU Delft or the partner institution;
 - c. Requirements for the doctoral dissertation (art. 9 and 14 Doctoral Regulations, Executive Decision parts D and E). Additional requirement: supervision by partner institution to be mentioned on reverse side of the title page;
 - d. The doctoral defence ceremony must be held at TU Delft (Executive Decision part F);
 - e. Any doctorate issued on behalf of TU Delft cannot include the designation 'cum laude'.

Unless otherwise agreed, the defence will be held at TU Delft in accordance with the TU Delft Doctoral Regulations, and one diploma will be issued by TU Delft, in accordance with the guidelines of TU Delft. The partner institution will also issue a diploma.

4. To the diploma to be issued, the following will apply:
 - a.
 - Both partner institutions refer to the cooperation in the diploma text.
 - On the TU Delft diploma, in addition to the usual text, the following words are to be included:

'This is a dual diploma together with the following partner institute for higher education:

... [name, city, country] ...,

stipulated in the diploma supplement and approved by the Board for Doctorates.'

- The partner institution must include the above text or words of similar meaning on the diploma, the diploma supplement or another document.

- b. A supplement written in English will be added to the TU Delft diploma stating:
- the name of the research groups and supervisors who were involved in the realisation of the dissertation;
 - the subject of the research;
 - the education and training courses completed, if these are not stated on the Doctoral Education certificate;
 - the conferences at which the candidate has presented the work done;
 - the publications to which the candidate has made a significant contribution, as evidenced by (co)authorship.

The partner institution must include the above sections insofar as possible on the diploma supplement or another document.

- c. The TU Delft Graduate School Office will provide a template for the diploma supplement to be completed by the promotors. The promotors may also propose adding relevant information relating to the research and the education of the candidate. The completed template is submitted, along with the approval of the draft doctoral dissertation, to the Graduate School Office. The Graduate School Office takes care of production of the supplement, which is given a TU Delft seal and is signed by the chairperson of the Board for Doctorates of TU Delft.

5. Regarding the doctoral defence ceremony, a formal statement will be drawn up for the benefit of the partner institution detailing which formal procedures relating to the evaluation of the doctoral dissertation, its doctoral defence, and the awarding of the degree of doctor have taken place. The statement will be signed by the Rector Magnificus, or by an equivalent officer, together with the diploma.

C. Further explanation of Doctoral Education Programme (Article 6 Doctoral Regulations)

1. The Doctoral Education (DE) program consists of the following three categories: transferable, research-related and discipline-related skills. For each category, a candidate must obtain 15 GS credits, making a total of 45 GS credits, of which at least 5 GS credits must be obtained by completing Learning on-the-job activities. 1 GS credit equals 12 hours of Doctoral Education which includes up to four hours of self- study.
2. The Board for Doctorates oversees the quality of the programme's contents and can impose further quality requirements and/or reject courses that do not conform to the overall quality requirements. In addition, the Board for Doctorates may require certain courses to be completed, such as an introductory course or a career development course.
3. On the basis of a request by the doctoral candidate, the Board for Doctorates can decide to grant the doctoral candidate an exemption for part of the DE programme. In order to be able to attain a DE certificate despite the exemption, the doctoral candidate must have obtained at least 30 GS credits.
The following rules will apply in the case of an exemption request:
 - a. The application must be supplemented by a reasoned request written entirely by the candidate;
 - b. The promotor and the FGS support the request before it is sent to the Board for Doctorates via the UGS;
 - c. An exemption request must be submitted within one year after the start date of the Doctoral Programme and involve a minimum of 5 GS credits;
 - d. No exemption will be granted for learning on-the-job activities.
4. On the basis of a request by the doctoral candidate, the Board for Doctorates can decide to grant said the doctoral candidate dispensation from the DE obligation, which means that the doctoral candidate is wholly exempted from it. A dispensation is granted only in exceptional circumstances, for example to very experienced doctoral candidates who can demonstrate that they already have all the required skills at a high level. The intended promotor and the doctoral candidate believe that there are valid reasons to request a full dispensation from the DE programme. A request for dispensation must be submitted within the first four months from the start date of the Doctoral Programme to the director of the Faculty Graduate School, who – if the director agrees to it – will present the request to the Board for Doctorates. The granting of the dispensation means that no DE certificate will be issued.

D. Requirements and format of doctoral dissertation (Articles 5 and 9.3 Doctoral Regulations)

1. Contents

- 1.1. The subject of the doctoral dissertation must relate to the academic fields into which research is being conducted at the university.
- 1.2. The doctoral dissertation must clearly demonstrate the ability of the candidate to practise science in an independent manner. It will consist of a scientific treatise, or a collection of articles previously published by the candidate, or a combination of both of these.
- 1.3. If one or more articles have been written by multiple authors, only articles written predominantly by the doctoral candidate will be accepted as doctoral articles. The doctoral candidate and the promotor are responsible for ensuring that the other authors of articles included in the doctoral dissertation have given their consent for this in writing.
- 1.4. The doctoral dissertation must be free of plagiarism. The promotor is responsible for ensuring that this is the case and is to make a statement to this effect upon approving the draft doctoral dissertation. TU Delft requires the promotor and doctoral candidate to submit a digital version of the (draft) doctoral dissertation for a plagiarism scan using the software made available for this by the TU Delft Library.
- 1.5. The doctoral dissertation, particularly any foreword and/or epilogue, may include a brief word of thanks expressed in an appropriate form of language and in consultation with the promotor. An acknowledgements section is also permitted, as is common practice in international literature. These sections will not be considered as proof of aptitude for the independent practice of science. With the exception of these sections, the doctoral dissertation will not include any expressions of beliefs (religious or otherwise), advertisements or other writing that does not relate directly to the doctoral dissertation. To the extent that such elements are contained in the text, they will be very limited in size, and will not be offensive or contrary to public order or common decency, and will comply with article 5.2 of the Doctorate Regulations.

- 1.6. The doctoral dissertation should also state which flow of funds was used to (partly) finance the research, whereby the following distinctions are to be made:
- a. first flow of funds: funds allocated by the Ministry of Education, Culture and Science to the university, including research, policy and education incentive funds, etc.
 - b. second flow of funds: funds allocated by the Ministry of Education, Culture and Science via the Netherlands Organisation for Scientific Research (NWO) and its foundations such as FOM, STW and SON;
 - c. third flow of funds: funds from industry, institutions or organisations, but also from the Royal Netherlands Academy of Arts and Sciences (KNAW), IOP (even if FOM or STW act as administrative secretary), the EU, or the Ministries of Economic Affairs and Education, Culture and Science themselves;
 - d. fourth flow of funds: from other sources, such as self-acquired grants or scholarships, donations, awards, interest, profits from projects, etc.

2. Structure

The doctoral dissertation is to be structured as follows:

- a. a title page;
- b. a table of contents;
- c. a summary in Dutch and English;
- d. a foreword (optional);
- e. an introductory chapter, which explains the substantive coherence of the issues addressed in the subsequent chapters;
- f. chapters containing treatises about the research and/or the design, either based on prior publications by the candidate or not;
- g. a concluding chapter explaining the scientific and technical implications for society of the research findings in considerable detail;
- h. an epilogue (optional);
- i. an acknowledgements section (optional);
- j. curriculum vitae and a list of the doctoral candidate's publications.

The propositions are to be added to the doctoral dissertation on a separate sheet (Executive Decision Part E).

Re: a. title page

The title page consists of two sides.

The front of the English-language title page bears the following text:

[... Title of dissertation...]
Dissertation
for the purpose of obtaining the degree of doctor
at Delft University of Technology
by the authority of the Rector Magnificus *[titles, name]*;

Chair of the Board for Doctorates
to be defended publicly on
[date: weekday (in full) day (number), month (in full) year (number)] at
[hh:mm] o'clock
by
[first names in full and SURNAME in upper case]
[highest academic title, name university, country]
born in *[town/city, country of birth]*

The reverse of the English-language title page bears the following

text: This dissertation has been approved by the promotor[s].

Composition of the doctoral committee:

Rector Magnificus,	chairperson
<i>[titles name]</i>	Delft University of Technology, <i>promotor</i>
<i>[Dr. titles name]</i>	<i>[affiliation], copromotor</i>

Independent members:

Prof. <i>[titles name]</i>	Delft University of Technology
<i>[titles name]</i>	<i>[affiliation]</i>
<i>[titles name]</i>	<i>[affiliation]</i>
<i>[titles name]</i>	<i>[affiliation]</i>

The front of the Dutch-language title page bears the following text:

[... Title of dissertation...]
Proefschrift
ter verkrijging van de graad van doctor
aan de Technische Universiteit Delft,
op gezag van de Rector Magnificus prof. *[titels, naam]*;
voorzitter van het College voor Promoties,
in het openbaar te verdedigen op
[date: weekday (in full) day (number), month (in full) year (number)] at
[hh:mm] o'clock by
[first names in full and SURNAME in capital letters] [academic title in full,
name of university, country]
geboren te *[town/city, country of birth]*

The reverse of the Dutch-language title page bears the following text:

Dit proefschrift is goedgekeurd door de promotor[en].

Samenstelling promotiecommissie bestaat uit:

Rector magnificus,	voorzitter
[titels naam]	TU Delft, promotor
[titels naam]	[affiliatie], copromotor

onafhankelijke leden:

Prof. [titels naam]	TU Delft
[titels naam]	[affiliatie]
[titels naam]	[affiliatie]
[titels naam]	[affiliatie]

To be added to this, where applicable:

- a. the second promotor and/or copromotor;
- b. other members of the doctoral committee (not being independent members); a substitute member;
- c. an explanation about any significant contributions to the preparation of the dissertation by any member of the committee: [titles name] [affiliation] has, as supervisor, contributed significantly to the preparation of this dissertation.

If the doctoral candidate has received substantial assistance or support in preparing a doctoral dissertation from a member of TU Delft academic staff other than the (co)promotor, or by a member of academic staff from an external institute for scientific research, the name of that staff member and their contribution can also be mentioned briefly on the title page, provided the promotor consents to this.

Organisations or persons who have sponsored or made a financial contribution to the realization of the dissertation and/or the related research must be mentioned on the reverse side of the title page. See article D.1.6.

In the case of a joint diploma, as referred to in article 3 of the Doctoral Regulations, this fact must be mentioned on the reverse side of the title page as follows:

'The doctoral research has been carried out in the context of an agreement on joint doctoral supervision between [name university, city, country], and Delft University of Technology, the Netherlands.'

On the front of the title page, under the name of the candidate, the highest obtained academic title as awarded in the country in which the candidate's studies were completed is to be stated, followed by the name and country of the university.

The title page, front and reverse, will be submitted by the doctoral candidate to the Graduate School Office for review and approval on behalf of the Board for

Doctorates.

Re: b. table of contents

With the table of contents, it is possible to include a list to explain any abbreviations and symbols, figures and tables.

Re: c. summary

The summary must in any case contain the following:

- a. the research question;
- b. a concise description of the research and/or design methods;
- c. a concise description of the results obtained;
- d. conclusions and possible applications and implications.

The doctoral dissertation must in any case include a summary in Dutch and in English.

The doctoral candidate will be offered the opportunity to have a summary of the doctoral dissertation published in 'Doctoral dissertation Abstracts International - Section C' (European Abstract).

Re: f. chapters containing treatises about the research and/or the design, either based on prior publications by the candidate or not

If the doctoral dissertation consists wholly or in part of previously published papers, the following applies:

- a. they must have been published in, or have been accepted for publication by – preferably –reputable, international scientific journals;
- b. they must be consistent with the latest scientific knowledge at the time when the doctoral dissertation is submitted, or must be made consistent by means of editing or additional comments;
- c. they must demonstrate substantive coherence in terms of the subjects addressed.

If the treatises relate to a doctoral design (article 1.4 of the Doctoral Regulations), the chosen design methods, the design choices and the (interim) results in the chapters must be described, documented and discussed in a scientifically sound manner.

Careful references must be made to the literature consulted, either after each individual chapter or after the final chapter for the entire doctoral dissertation.

Re: j. curriculum vitae and a list of the doctoral candidate's publications

At the end of the doctoral dissertation, a (concise) curriculum vitae of the doctoral candidate must be included, stating:

- a. date and place of birth;
- b. which pre-university or comparable education the doctoral candidate underwent, including relevant dates;
- c. the nature of education undergone in preparation for the final Master's examination and relevant dates;
- d. any qualifications obtained with the diplomas;
- e. if applicable, details of any professional practice after completing the Master's degree;
- f. the name of the institution at which the research was conducted.

3. Language

The doctoral dissertation is to be written in Dutch or in English, with English being the preferred language. In those exceptional cases in which the candidate wishes to use another language, a request must be submitted to the Board for Doctorates before the draft doctoral dissertation is submitted to the promotor. The request is to be accompanied by the written consent of the promotor. The Board for Doctorates will communicate its decision concerning this request in writing to the doctoral candidate, and will also send a copy to the promotor.

4. Design

The doctoral dissertation will be in book form. The doctoral candidate is responsible for the further design of the doctoral dissertation, according to the conventions prevailing in the Netherlands in the academic field in question.

5. Costs and distribution of the doctoral dissertation

- a. The cost of printing and distributing the dissertation will in principle be borne by the doctoral candidate. The dean of the promotor's faculty can provide information about any (partial) reimbursement for costs resulting from this. The faculty office must be contacted in good time to discuss this.
- b. The number of copies of the dissertation to be produced for the faculty will be determined in consultation with the promotor.
- c. The doctoral candidate must bring two copies of the dissertation with propositions in book form to the doctoral defence ceremony.
- d. The members and chairperson of the doctoral committee must have received a dissertation in book form, including propositions, from the doctoral candidate no later than two weeks before the set doctoral defence date.
- e. When it comes to further distribution of copies of the dissertation, a digital version may suffice.
- f. The doctoral candidate is required to make a digital version of the dissertation (as a PDF file, or in some other agreed format) available to the University Library for inclusion in the Open Access TU Delft Repository.

6. Communications with the media

It is sometimes appropriate to draw the attention of selected media to the content of a doctoral dissertation by means of a press release, or in some other way. In some cases, the university's Press and Science Information Office will issue a press release, either at the instigation of the promotor or the doctoral candidate or not. The promotor and candidate will in any case receive a copy of the press release in good time.

For the purpose of this press release, the doctoral candidate will provide the university's Science Information Officer with a brief written explanation of the key results and the possible applications of the doctoral research. The Science Information Officer can provide further information on the structure and content of the press release. The promotor may, after consultation with and with the consent of the Rector Magnificus, request that until after the doctoral defence ceremony has taken place an embargo be enforced on a press release or press interviews with the doctoral candidate.

E. Requirements for the propositions (Article 9.5 Doctoral Regulations)

1. Propositions are to be added to the doctoral dissertation. As a guideline, the total number of propositions should not exceed ten. The promotor should approve the propositions on this basis, and the sheet on which the propositions are printed should include the following text:

'These propositions are regarded as opposable and defensible, and have been approved as such by the promotor(s) [name (co)promotor(s)].'

2. At least six propositions must not pertain to the subject of the dissertation. This distinction must be clearly indicated by stating under propositions where this is appropriate: *'This proposition pertains to this dissertation.'*
3. A maximum of two of the propositions may be somewhat playful in nature, provided that they are opposable and defensible.
4. The propositions should demonstrate that the doctoral candidate has a broad base of scientific knowledge that is not limited to the subject of the doctoral dissertation. Possible subjects could include:
 - a. new perspectives created by the doctoral dissertation;
 - b. results of incidental interest, which are not included in the doctoral dissertation;
 - c. (critical) comments on the literature relating to technical sciences;
 - d. comments on related disciplines and/or the methods used;
 - e. speculative statements about future developments, which cannot yet be definitively verified. The propositions should preferably include literature references and/or sources.
5. The propositions are to be submitted together with the draft doctoral dissertation.
6. The propositions are to be written in Dutch or in English, with English being the preferred language, or where applicable in the language in which the doctoral dissertation is written. Appendix I contains further considerations relating to the quality of the propositions.

F. Preparation for and procedures during the doctoral defence ceremony and the awarding of the degree of doctor (Articles 15, 16, 17 and 18 Doctoral Regulations)

1. Doctoral defence ceremony (general)

- 1.1. The doctoral defence ceremony takes place in public before the Board for Doctorates or a doctoral committee established by it. The Rector Magnificus chairs the doctoral defence ceremony. However, the Rector Magnificus is generally represented by a member of the Doctoral Examination Working Committee. Members of the Board for Doctorates may also take the place of the Rector Magnificus and are in fact part of the Working Committee.
- 1.2. Once the date of the doctoral defence ceremony is known, a chairperson is to be appointed from among the members of the Doctoral Examination Working Committee. Until such time as a chairperson is appointed, the Rector Magnificus will act as chairperson and deal with any matters that need immediate attention.
- 1.3. In exceptional cases, the Board for Doctorates may permit (a part of) the opposition and the defence, to be conducted in a language other than Dutch or English. For this purpose, a request must be submitted to the chairperson of the doctoral committee by the promotor (via the Graduate School Office) no later than two weeks before the doctoral defence date. The chairperson of the doctoral committee will take a decision on this within one week and will then inform the advisors and members of the doctoral committee and all others involved.
- 1.4. The doctoral defence ceremony usually takes place in the Senate Hall of the university. If there is a joint doctorate, it may be agreed that the ceremony will take place at the partner institution according to the rules and protocol applicable there, and in accordance with the cooperation agreement (see Guidelines on the Graduate School website).
- 1.5. The chairperson may limit access to the hall if there are issues of (fire) safety or public order due to the capacity of the location. Children under the age of four years and (domestic) animals with the exception of assistance dogs are not allowed into the defence ceremony. The chairperson may also deny access to the ceremony to any persons who cause disruption.
- 1.6. During the defence of the doctoral dissertation and the propositions, the doctoral candidate can be assisted by one or two paranympths (supporters). The paranympths may assist by reading out propositions or presenting (parts of) the doctoral dissertation or the doctoral design.

- 1.7. If during the doctoral defence ceremony circumstances arise which, in the opinion of the chairperson, impede the normal course of proceedings, the chairperson will decide how to proceed further. If the chairperson decides to suspend the proceedings prematurely, the Rector Magnificus will be notified as soon as possible, after which the Rector Magnificus will take appropriate action.
- 1.8. All those in attendance will demonstrate the appropriate respect for the academic ceremony that is taking place and for the members of the doctoral committee by standing when instructed to do so by the beadle - namely when the chairperson stands or enters the hall.
- 1.9. The doctoral committee will meet to deliberate 30 minutes before the start of the doctoral defence ceremony or, if a 'cum laude' designation has been proposed, 45 minutes before. Regarding the attendance of the members of the doctoral committee, the following rules will apply:
 - a. If the chairperson is unable to attend for any reason, the beadle will report this situation immediately to the Vice-Rector, or (if the Vice-Rector is absent) to another member of the Working Committee for Doctorates, who will take the action that said member deems fit.
 - b. If a member of the committee is unable to attend for any reason, the chairperson will be informed of this immediately and will take the action that the chairperson deems fit, taking into account the fact that the doctoral defence ceremony can only proceed if, in accordance with the Doctoral Regulations, the minimum number of full professors is in attendance and, in the opinion of the chairperson, there are enough independent examiners.
 - c. The chairperson will determine the order of the examiners, in consultation with the other members of the committee.
- 1.10. If other persons who are not members of the doctoral committee wish to examine the candidate, a written request to this effect must be submitted in writing at the latest two weeks before the agreed defence ceremony date to the Rector Magnificus, who will make a decision on whether to honour the request within one week. An examiner of this type must hold a doctorate or be authorised to act as a promotor.
- 1.11. It is highly recommended that, prior to the doctoral defence ceremony, doctoral candidates prepare an explanation of the essence of their doctoral dissertation, the results obtained and the possible applications, that is comprehensible to non-experts. This should be arranged with the University Graduate School in time. As a rule, the explanation begins 30 minutes before the doctoral defence ceremony and is completed no later than 10 minutes before the start of the doctoral defence ceremony.

- 1.12. The permission of the Rector Magnificus is required before making any recordings for radio or television during the doctoral defence ceremony. This permission must be obtained at least two weeks in advance of the doctoral defence ceremony. Making audio and video recordings or streaming a live video feed is permitted for personal use, e.g. so that family members abroad can also witness the proceedings.

2. Attire

- 2.1. During the doctoral defence ceremony, the chairperson, the promotor, the other members of the committee as well as the candidate and any paranymphs, are to dress as follows, as prescribed by protocol:
 - a. Full professors are to wear the ceremonial dress associated with the academic traditions relating to doctoral defence ceremonies at the institution that they belong to, or wear a gown and paraphernalia of TU Delft. Underneath this, a white dress shirt with a grey tie or a white blouse or white shirt bib is worn, with dark trousers or a dark skirt, and black shoes.
 - b. Delft full professors are to wear a gown and cap, and a sash over their gown, and the chairperson of the doctoral committee is to wear the chain of office of the Rector Magnificus.
 - c. Other committee members are to wear a black morning coat with white dress shirt, grey waistcoat and grey tie, or a black, dark grey or dark blue dress or skirt with a blouse of the same colour or a white blouse, and black shoes.
 - d. The doctoral candidate and paranymphs are to wear a white tie ensemble: a black dress suit with white dress shirt and waistcoat, white bow tie and black shoes or a black, dark grey or dark blue dress or skirt, of knee length as a minimum, with a blouse of the same colour or a white blouse, and black shoes.
 - e. The beadle is to wear a gown with sash and cap, the beadle's staff and black shoes, a dark suit, white dress shirt, grey tie or other appropriate clothing.
- 2.2. Full professors are to wear their caps while examining and after the resumption of the doctoral defence ceremony; the chairperson is to wear a cap for the duration of the ceremony.
- 2.3. The beadle will ensure that the clothing is worn appropriately and in a manner that befits the dignity of an academic ceremony.

- 2.4. If the doctoral candidate wishes to depart from the ceremonial dress described above and wear ceremonial dress associated with an academic culture or academic tradition, or otherwise deviate from the ceremonial dress described in paragraph 1d, permission must be obtained from the Board for Doctorates at least two weeks before the doctoral defence ceremony. The Board for Doctorates will grant permission if they judge that the attire is in accordance with the value which the University attaches to the ceremony.

3. Doctoral defence ceremony, *first part*

- 3.1. The doctoral dissertation and the propositions will be defended by the doctoral candidate for one hour in the face of the reservations of the doctoral committee, as well as those of any other person given permission in accordance with the Doctorate Regulations.
- 3.2. The chairperson opens the doctoral defence ceremony and invites the candidate to take up a position behind the lectern (and the paronymph(s) to be seated in the appropriate places). The chairperson introduces the committee members and then gives the floor to the first examiner, according to the order agreed beforehand. The examiner will express reservations one by one and the candidate will be given the opportunity to respond to each. A lively debate may arise and the chairperson will ensure that this is conducted fairly, and that the candidate has an adequate opportunity to defend himself.
- 3.3. Examiners are to remain seated while their reservations are heard. With regard to the order in which the examiners speak, the following rules apply.
 - a. If there are reservations from the hall, these will be heard first, with a limit of five minutes for the reservations to be expressed and answers to be given.
 - b. Of the members of the doctoral committee, the independent members from outside TU Delft will have the first opportunity to express their reservations. Generally, the independent members together will have at least 45 minutes to examine the candidate. The remaining members will subsequently be given the opportunity to examine, with the promotor examining last of all. It may occur that not all members have the opportunity to examine.
 - c. A copromotor will speak before the promotor. The committee members will all be given the opportunity to speak if possible, although the chairperson will usually refrain from examining the candidate.
- 3.4. The members of the doctoral committee (and any individuals wishing to speak from the audience) will address the candidate as 'waarde doctoral candidate' or 'waarde promovenda' ('worthy doctoral candidate').

The candidate uses the following forms of address for the members of the doctoral committee.

Chairperson: 'mijnheer/mevrouw de rector' ('Mr/Madam Rector').

A promotor who is a full professor: 'hooggeachte promotor' ('esteemed promotor').

A promotor who is not a full professor: 'zeer geachte promotor' ('highly honourable promotor').

Copromotor: 'zeergeleerde promotor' ('learned promotor'),

if not a holder of a doctorate: 'geachte promotor' ('honourable promotor').

Full professors: 'hooggeleerde opponent' ('most learned opponent');

Doctorate-holding members: 'zeergeleerde opponent' ('learned opponent').

Non-doctorate-holding members: 'geachte opponent' ('honourable opponent').

- 3.5. Any opponents from the audience will be addressed by the doctoral candidate as 'zeergeleerde opponent', or (if it is a full professor) as 'hooggeleerde opponent'. These forms of address (as stated in 3.4 and 3.5) are also to be used even if the ceremony takes place wholly or partly in a language other than Dutch.
- 3.6. Unless otherwise decided by the chairperson the ceremony will last for sixty minutes before being adjourned. The beadle will announce that the academic hour has passed with the words 'hora est'. Thereafter the chairperson will ask the doctoral candidate (and the paranymphs) to take their seats in the hall and indicate that the doctoral committee will retire for further deliberation.

4. Doctoral defence ceremony, second part

- 4.1. If, following the deliberations of the committee as referred to in article 17.1 of the Doctorate Regulations, they decide that a doctorate is to be awarded, after the public meeting is reconvened, the chairperson will invite the doctoral candidate (and any paranymphs) to stand before the committee and the chairperson will announce to the candidate in the manner prescribed by protocol that the doctoral committee has decided to award the doctorate on behalf of the Board for Doctorates.
- 4.2. If, following the deliberations of the committee as referred to in article 17.1 of the Doctorate Regulations, they decide that a doctorate is not to be awarded, the chairperson will invite the doctoral candidate to join the meeting of the committee in accordance with article 17.3 of the Doctorate Regulations.
- 4.3. If the designation 'cum laude' is also to be attached to the doctorate, this will also be announced. At the request of the chairperson the promotor will then bestow the degree onto the doctoral candidate using the prescribed wording, after which the promotor will present

the candidate with the signed diploma. The words of the chairperson are pronounced in Dutch while all those present stand.

- 4.4. When granting the doctorate (cum laude), the chairperson will use the following wording (in Dutch):

'Het College voor Promoties van de Technische Universiteit Delft; vertegenwoordigd door de hier aanwezige commissie; heeft, na kennis te hebben genomen van uw proefschrift met stellingen en na uw verdediging daarvan te hebben gehoord; met inachtneming van het bepaalde in de Wet op het hoger onderwijs en wetenschappelijk onderzoek; besloten u de graad te verlenen van doctor (en wel cum laude). Ik verzoek de promotor door het College voor Promoties als zodanig aangewezen; zich wel van de hem opgedragen taak te kwijten.'

The promotor, standing to the right of the chairperson, will say the following (in Dutch):

'Uit kracht van de bevoegdheid bij Wet toegekend aan het College voor Promoties; verklaar ik namens dat college; hier vertegenwoordigd door de Rector Magnificus en de overige leden van de commissie; bij deze u [...naam....] te bevorderen tot doctor (en wel cum laude) en u alle rechten te verlenen welke aan de doctorstitel zijn verbonden. Ten bewijze hiervan overhandig ik u het diploma dat u het recht geeft de titel "doctor" te voeren; ondertekend door de Rector Magnificus en de promotor(en) en voorzien van het zegel van de Technische Universiteit Delft.'

In the case of joint diplomas, the chairperson will speak the following words (in Dutch and English):

'Uw diploma is een tweeledig diploma samen met het volgende partnerinstituut voor hoger onderwijs: ...[naam, plaats, land]...., opgenomen in het diplomasupplement en goedgekeurd door het College voor Promoties.'

'Your diploma is a dual diploma awarded together with the following partner institute of higher education: ... [name, city, country]...., stated in the Diploma Supplement and approved by the Board for Doctorates.'

- 4.5. After the members of the doctoral committee and the audience are seated, the promotor or copromotor of the new Doctor will stand and address the new Doctor and finally wish the new Doctor good luck. Subsequently, the chairperson will point out the scientific integrity that is explicitly required of all holders of the title of Doctor and congratulate the new Doctor on behalf of the Board for Doctorates by speaking the following text (in English, if this was the language used during the defence ceremony):

'Zeergeleerde dr.[....naam],

U hebt vanaf nu het recht de doctorstitel te dragen. Uw doctorstitel betekent dat de samenleving op uw oordeel kan vertrouwen, dat u transparant handelt en onafhankelijk communiceert over uw resultaten en de maatschappelijke relevantie van uw werk; met andere woorden. uw doctorstitel impliceert wetenschappelijke integriteit. Ik wens u veel wijsheid en voorspoed met uw nieuwe waardigheid.

Namens het College voor Promoties van de Technische Universiteit Delft feliciteer ik u (en uw familie) met de behaalde doctorsgraad.'

'Learned Doctor,

*You now have the right to use the title of doctor. Your doctorate means that society can rely on your judgement, that you will act transparently and communicate independently about your results and the **social** relevance of your work. In other words, your doctorate implies that you will uphold scientific integrity. I wish you a great deal of wisdom and prosperity with your new status. On behalf of the Board for Doctorates of Delft University of Technology I congratulate you (*and your family) on earning your doctoral degree.'*

- 4.6. The chairperson will then request the new Doctor (and the paranymphs) to take their places in the hall and will then close the session. After this, all those present will stand and the Committee will leave, following the beadle to the Senate Hall.

5. Diploma

- 5.1. The diploma will be produced in accordance with the model given in Appendix II, unless otherwise determined, stating the accompanying register number.
- 5.2. The diploma will be in English.
- 5.3. A dual diploma will be in English.

G. Advisory Committee (Article 19.3 Doctoral Regulations)

1. Appointment

The Board for Doctorates will appoint a committee to handle disputes, as referred to in article 19 of the Doctoral Regulations; the committee will be known as the TU Delft Doctoral Arbitration Committee.

2. Composition

- 2.1. The Committee consists of a chairperson and a deputy chairperson, who will also be a member, as well as four members.
- 2.2. Advice on a dispute will be issued by three members, including the chairperson or the deputy chairperson.
- 2.3. Notwithstanding the provisions of article 7:13, third paragraph of the General Administrative Law Act, hearings can be chaired by the chairperson, the deputy chairperson or a member who is not part of or working for the Board for Doctorates, in the event of the sudden absence of the chairperson, the deputy chairperson or one or more members on the date of the hearing.
- 2.4. The chairperson, the deputy chairperson and committee members are appointed by the Board for Doctorates for a maximum period of three years, and they can be reappointed twice.

3. Appointment criteria and requirements for each dispute

- 3.1. The chairperson, the deputy chairperson and the members must be full professors.
- 3.2. The chairperson and deputy chairperson must not be part of or responsible to the Executive Board.
- 3.3. The members are not directly involved in the dispute or the doctoral dissertation and will not receive instructions from the Board for Doctorates regarding the dispute.

4. Dismissal

- 4.1. After hearing the relevant individual, the chairperson, deputy chairperson and committee members may be dismissed by the Board for Doctorates if they are shown to be performing inadequately, or if there are other substantial reasons for doing so in the opinion of the Board for Doctorates.
- 4.2. The chairperson, the deputy chairperson, and the members may also resign from the committee at their own request at any time.

5. Secretariat

- 5.1. The Board for Doctorates, in consultation with the Executive Board, will appoint a secretary and one or more deputy secretaries, to assist the committee.
- 5.2. The secretary and deputy secretary will not be part of the committee.

H. Continuation of promotorship after the honourable discharge (Article 8.4 Doctoral Regulations)

1. Request for continuation of promotorship

If full professors or associate professors who have been appointed promotors by the Board for Doctorates are given an honourable discharge and wish to make use of their right to act as promotors for the doctoral candidates they are supervising for another five years, they can submit a written request to this effect to the Board for Doctorates, after approval has been given by the dean of the relevant faculty.

2. Request to dean

Prior to the request to make use of the right to act as a promotor after an honourable discharge, full professors or associate professors will ask permission from their dean for continuation of the supervision of the doctoral candidates which the full professors or associate professors are supervising. Explicit attention will be paid to the way in which the continuation of the supervision will take place, as well as to any transfer of doctoral candidates to other promotors. The dean can make proposals to the Board for Doctorates for additional or replacement promotorships.

3. Supervision of doctoral candidate

If no other (co)promotor is appointed alongside a full professor or associate professor who is receiving honourable discharge, it will be necessary to propose at least one supervisor to the Board for Doctorates as (co)promotor with an employment contract with TU Delft for a number of hours which means that the supervisor is available to a sufficient extent for the performance of the corresponding duties and responsibilities. The proposal of a new supervisor must take place using Form A.

4. Submission of request

The request referred to in paragraph 1 of this article must be submitted by the full professor or associate professor to the Graduate School Office in good time before the end of the employment, and contains:

- a. the request of the full professor or associate professor, initialled for approval by the dean;
- b. an overview of the doctoral candidates allocated to the full professor or associate professor by the Board for Doctorates, specifying the candidates for whom they wish to continue the supervision or not;
- c. form A, if a new (co)promotor is proposed.

Appendix I: FURTHER REMARKS ON THE PROPOSITIONS (in English)

Opposability of propositions

Many candidates find it hard, after completion of a prolonged investigation, to go on to formulate propositions that can spark a scientific debate. While their doctoral dissertation then demonstrates their ability as a researcher, it gives no evidence that they are able to formulate hypotheses that would serve as a challenge to further investigation. The hypotheses underlying a doctoral study are developed with the necessary guidance, and are no longer explicitly discussed during long periods of investigation. It is precisely the ability to pose scientific questions oneself that is tested by the formulation of bold propositions and their defence in public.

To this end, the propositions appended to a doctoral dissertation must not be only positive statements that can be defended within a certain field of science, but must also be challenging. For example, the proposition 'the sun will rise tomorrow' may be defensible but it is not at all challenging in the current intellectual climate and could never trigger a debate of pros and cons capable of advancing the boundaries of science. Hence, the propositions appended to the doctoral dissertation must be not only scientifically sound and defensible but also opposable. Propositions might give offence to many people if they are weak and as such they will not contribute to the academic objectives of the graduation ceremony or the good name of our University. To ensure the quality of the propositions, the supervisor is required to sign a statement confirming that the propositions are 'opposable and defensible'.

Decisiveness

The demand that propositions must be opposable as well as defensible adds two requirements: decisiveness and boldness. A proposition may be said to be 'decisive' if, for example, it is true or false (i.e. not a question, exclamation or command) and without tautology or attenuating qualification such as 'often', 'sometimes' or 'to a considerable extent'. Vague quantors cannot be refuted by opponents during the public defence of the doctoral dissertation, and must therefore be regarded as 'not opposable'. If necessary, a proposition may contain the qualifier 'generally' or 'usually', since this means literally 'in more than 50% of the cases', but such probabilistic quantors make both opposition and defence impossible when the relevant statistical data are not available during the debate. A proposition with existence quantor (there is a case where ... applies) is only opposable when no example is yet known (e.g. before 1988: 'a proof of Fermat's last theorem exists'). In fact, such propositions are very appropriate for a university of technology, for inventions and designs. They have the general form: "There is a possible method (or technique) to ...".

A generalizing all-quantor (it may be stated in any case that ...) challenges the opposition to present counter-examples. When the proposition does not contain an explicit quantor, an implicit all-quantor may be assumed, though

the opponent would do well to ask the candidate “Does this apply in all cases?” before producing a counterexample. Such a debate is scientifically productive when it clarifies the assumptions under which the proposition applies and those under which it does not. If a counterargument is produced, the candidate can reformulate the proposition to “Apart from such and such a case, it may be stated that ...” and invite the opponent to find a further counter-example. If the revised proposition stands up to attack, it has been successfully refined and may be regarded as a ‘triumph of science’.

The challenging nature of propositions

To state that a proposition is ‘challenging’ means that there is some doubt about its scientific truth or falsehood, so that arguments pro and contra it can be weighed against one another. If there is absolutely no doubt about the truth of a proposition, it no longer has any relevance for the advancement of science. A proposition assumed by everyone to be true can be defended, but there is no point in investigating it any further. Conversely, a proposition that is clearly false does not come into consideration for further investigation. It only becomes scientifically interesting if some doubt exists as to its truth. A scientific hypothesis (literally sup-position) to be tested by investigation is thus challenging by definition, since otherwise there would be no point in the investigation. The most valuable propositions are those which are generally regarded to be untrue (such as the views put forward by Copernicus in his time) but which, possibly on the basis of new evidence, turn out to be defensible. Such propositions demonstrate the candidate’s critical and innovative approach and the candidate’s ability to advance the boundaries of science.

Subsequent propositions may concern matters not dealt with in the thesis, and indeed belong to other scientific disciplines. For example, the candidate may question the validity of the results of other investigations, possibly in fields other than the candidate’s own, which may be cited in the proposition. A proposition casting new light on our preconceived ideas lends itself very well to a humorous formulation. A joke is characterized by a change in assumptions during the narrative, and the primary task of science is to replace existing assumptions by hypotheses that show empirical reality and its technical potential in a new light. The testing or verification of such hypotheses is its second task.

Defendability

The ‘defendability’ of a proposition means that while the truth of the proposition is not self-evident (i.e. the proposition is challenging in the sense used above), sound scientific arguments can be advanced in its favour. The field of science in which these arguments are valid (not necessarily ‘reliable’) and defensible should be mentioned explicitly in the proposition (e.g. ‘in psychology’). This will serve to limit the number of playful propositions and allows the candidate to show that the candidate’s insights extend beyond the boundaries of the candidate’s own domain (universitas). In this context, ‘defensible’ also means ‘morally acceptable’.

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The Board for Doctorates of Delft University of Technology

declares, under the provisions of art. 7.18 of the Higher Education and Research Act
(Staatsblad 1997, no. 322) and the Doctoral Regulations, that

Xxxx Xxxxxx Xxxxxxxxxx

born XX Xxxx XXXX in Xxxxxxxxx, Xxxxxxxxx

having presented and successfully defended a dissertation entitled

**Xxx Xxxxxx Xxxxx Xxx Xxxxxx
Xxxxxx Xxxxxxxxxxxxxxxxxxxx Xxxx**

with attached propositions, both supervised by

Xxxx.xx. X.X.X.X. Xxxxxx

has been awarded the Degree of DOCTOR.

Delft, XX Xxxx XXXX

On behalf of the Board for Doctorates

Promotor(s)

Rector Magnificus

APPENDIX III: Timeline for final phase of Doctoral Programme

