

Guide for the author of a doctoral thesis at the Faculty of Science

I. General information on the doctorate

The doctorate is the highest academic degree achievable from the university and should express recognition that:

1. The author has demonstrated considerable scientific insight and maturity, and
2. that his/her thesis has contributed substantially to the advancement of science.¹

A doctoral thesis may comprise a thesis or several theses related in topic or method. If a doctoral thesis comprises several theses (articles), an executive summary must be included of the research results considered accomplished by the author. All material submitted as part of a doctoral thesis will be evaluated equally. No distinction is made between the doctoral thesis itself and any "supplementary background material".

If you wish to hand in a monograph, you can read more about the special requirements governing the presentation of monographs in the "[Supplementary regulations and procedures of the Faculty of Science in connection with Ministerial Order no. 750 of 14 August 1996 of the Danish Ministry of Education on doctoral degrees](#)" (only in Danish).

II. Who can submit a doctoral thesis?

Persons who have acquired a master's degree or a PhD within the topic most relevant, are entitled to submit a doctoral thesis for evaluation. The faculty may, however, allow other master's degrees or PhDs within other topics to submit a thesis. For use in the faculty's processing of the case, the following information must be presented together with the thesis:

- a statement of the author's career with special attention to academic and corporate experience of significance to the relevant scientific work.
- If the applicant has previously compiled scientific theses or articles, he/she should be encouraged to make such work available to the faculty.
- If the person submitting a thesis has completed an education programme abroad, any particular reasons for receiving evaluation in Denmark and not in the country where he/she completed his/her education programme must be provided. Examples of such special conditions which may justify evaluating the thesis in Denmark could be:
 1. Personal reasons: The person in question is a Danish citizen, of Danish origin, married to a Dane or resides in Denmark.
 2. Scientific reasons: The topic for the thesis concerns Danish conditions or has special scientific interest for Denmark; the topic has particularly been cultivated by Danish scientists; or the person in question has had close cooperation with Danish research institutes in the processing of the thesis.

¹ Section 3(2) of Ministerial Order no. 750 of the Ministry of Education of 14 August 1996 on doctoral degrees (in the following "the Ministerial Order").

The faculty may in case of doubt ask the author to submit previously prepared scientific theses or articles.

III. The thesis

III.1. Framework

The thesis must be submitted to the faculty (SCIENCE Research and Innovation (SCI-FI), Bülowsvej 17, 1870 Frederiksberg) in three copies or as pdf. files to SCI-FI@science.ku.dk. The thesis must include:

- Title (degree), name, address (including private address) and other contact information
- Danish abstract of the thesis
- Executive summary (see below)
- CV
- Co-author statements
- Statement of whether the thesis has undergone prior evaluation
- List of articles

III.2. Previously evaluated theses (resubmissions)

If the thesis has undergone prior evaluation with a view to obtaining a doctorate at a higher educational institution without the degree being awarded, the author must provide this information when the thesis is submitted. The faculty will then decide whether the thesis may undergo new evaluation.² For use in the processing, the author must submit the following:

- justified application,
- summary of the changes made in relation to the original thesis, and
- the revised thesis.

III.3. On PhD articles or similar in the thesis

If articles or research results from the thesis are included which have previously resulted in the author achieving an academic degree or obtaining positive evaluation in Denmark or abroad, the application must include information in this respect.

This information must be provided in the preface of the thesis. The following phrases should be used:

"The articles x-x were part of...(thesis, title, year)".

"Article no. x is based on results from my...(thesis, title, year)".

"The other articles x to x, or results achieved therein have previously been submitted for the purpose of obtaining an academic degree".

² Section 4(2), no. 3 of the Ministerial Order.

The doctorate can only be awarded if the thesis demonstrates that the author has obtained new research results which in themselves have contributed substantially to the advancement of science compared with those submitted earlier.³ The executive summary must state the relationship of the new research results.

III.4. Executive summary

On submission of multiple articles these must be accompanied by an executive summary. The summary must be written by the person wishing to obtain the doctorate on the basis of the theses submitted.

The summary must describe the work of the author and the current level of research of the topic. The thesis must be drafted such that it serves as information to peers who do not carry out expert work in the relevant topic. The summary must thus include:

- 1) A table of contents but not necessarily a subject index,
- 2) A short general description of the current problem within the research topic or research question treated in the articles submitted,
- 3) A short description of the results achieved with an evaluation of the methods applied, and a critical evaluation of the conclusions that the author considers he/she has accomplished on the basis of the results compiled.
- 4) A comparison and an evaluation of the results of other scientists to the extent that this is relevant for the presentation of the contribution(s) to which the author considers having provided clarification or solutions to the research question described,
- 5) If possible, a summary conclusion and/or guidelines for further research within the area, and
- 6) A bibliography specifying the titles of each of the works referred to.

III.5. Form of the thesis

1. The thesis must be written in English with a Danish abstract.⁴
2. There are no requirements that the thesis should include a specific number of articles. Therefore, the author must assess whether the articles chosen suffice. The typical number of articles is 7-10.
3. The articles for review must be presented in the form of already published articles, and the material submitted will then comprise special reprints of these articles. However, a manuscript may also be submitted if documentation is enclosed that this has been accepted and laid out for publication. Articles must, however, be published before the defence takes place.
4. If a thesis or parts thereof are the result of group work, a co-author statement must be enclosed, signed by the co-authors and by the author him/herself, specifying the extent and nature of his/her part in the group work. You can read more about the

³ Section 5(2) of the Ministerial Order.

⁴ Section 6 of the Ministerial Order.

entitlement to authorship in the supplementary regulations and procedures of the "[Faculty of Science in connection with Ministerial Order no. 750 of 14 August 1996 of the Danish Ministry of Education on doctoral degrees](#)" (only in Danish).

5. The thesis must be laid out as it will be presented in print in that, as a general rule, changes will not be accepted after submission.

IV. Evaluation

After reception of the thesis, a preliminary evaluation will be made of whether the thesis is written such that it is fair to subject it to an actual evaluation of whether the requirements laid down in section 3(2) of the Ministerial Order have been met, i.e. that the author has considerable scientific insight and maturity, and that the author has contributed substantially to the advancement of science with the thesis. A work committee associated with the Academic Council comprising the relevant council member, the associate dean of research and the relevant head of faculty will make a statement. This statement must solely state whether there is fair reason for subjecting the thesis to an actual evaluation, and not whether the thesis may be considered for defence for the doctorate. Similarly, the author will be notified that this does not imply that the thesis is admissible for defence.

After this, the relevant institute(s) will be requested to make proposals for the evaluation committee. Any issues of legal capacity between the author and the proposed assessor will then be examined. The author will then have the possibility of making a statement regarding the composition of the committee⁵, after which the committee will be presented to the Academic Council. If the author has objections, the composition of the evaluation committee will be re-examined.

When the Academic Council has approved the evaluation committee, the author must be able to withdraw the thesis from evaluation. After this, and until reception of the final recommendation by the evaluation committee, the thesis may only be withdrawn from evaluation, if the head of the faculty allows this citing **special circumstances**.⁶

The evaluation committee will be launched with a deadline for submission of the recommendation of six months. The author will be briefed on when the recommendation is expected to be available. Together with the recommendation, the chairperson of the evaluation committee must make proposals for the Academic Council as to who among the general committee members is to be first and second official opponent in the defence.

The recommendation by the evaluation committee will be sent to the applicant, who will have the opportunity to make observations or withdraw the thesis. The recommendation, any observations from the applicant as well as the order of opponents must be submitted to the Academic Council for approval.

If the council approves a positive recommendation, the thesis will be approved for public defence, and a chairperson for the defence will be appointed.

⁵ Section 9 of the Ministerial Order.

⁶ Section 9(2) of the Ministerial Order.

V. The public defence

V.1. *Printing of the thesis*

When the thesis has been approved, it must be published. This approval will be given, if the thesis through Dansk ISBN kontor, the Danish library center, or similar foreign institute, has been fitted with an ISBN number, with an ISSN number for periodical articles, or if the thesis is published electronically.

The thesis must be published with the text which has been approved. The head of the faculty may, however, after a concrete assessment and following recommendation from the evaluation committee, allow the author to make minor editorial changes or supplements to the thesis.

The printed thesis must be labelled with a text from the head of the faculty with the following wording:

"This thesis has been approved for public defence of the doctorate in XXXX by the Faculty of Science at the University of Copenhagen. Copenhagen, on.../...20xx...Name of the head of the faculty."

In the same place, time and place of the defence must be specified. The same information must be available in connection with an electronic version of the thesis.

The author must **no later than four weeks** prior to the defence submit an electronic version of the thesis or hand in 20 printed copies of the thesis without charge to the faculty for use in connection with the defence. There is an obligation to submit to the Danish Royal Library, the National Library in Aarhus, the central library at the University of Copenhagen, and to the archive of the faculty. The Faculty Secretariat will provide assistance in this respect. The theses must be submitted to SCIENCE Research and Innovation (SCI-FI).

V.2. *Practical information on the defence*

When the author knows when the thesis will be completed, the author must agree on a date for the defence with the chairperson.

The author must, in collaboration with the relevant institute secretariat, book a venue for the defence. Note that an adjacent room for the opponents must be booked. If the author wants to use other rooms than these, prior authorisation must be obtained from the faculty.

A sound recording must be made under the defence. On booking of rooms, equipment for sound recording must be ordered.

No later than four weeks after the defence, the author must inform the faculty service about time and place of the defence, such that the Faculty Service may advertise the defence in the calendar of the faculty's website, as well as in the online version of the University Post. Furthermore, the Faculty Service must receive notice about the place and

method of acquiring the thesis, as well as prices. The author is responsible for any advertisement in specific journals if he/she wishes this.

If a press release is issued, the communication officers from the relevant institute may be contacted for the purpose of providing assistance.

V.3. The defence itself

The entire defence may last a maximum of six hours, including breaks. The chairperson who is employed by the faculty plays a key role in the process. The chairperson is responsible for introducing the defence, acts as moderator, ensures compliance with formal rules as well as submission of the sound recording of the defence together with the signed statement by the opponents to the faculty.

If the author so wishes, he/she is entitled to introduce the defence in a lecture lasting up to 30 minutes, providing an overview of the topic and research results presented in the thesis and submitted for evaluation.

Generally, each of the two official opponents will be given an hour and a half, and every unofficial opponent will be given no more than 45 minutes; this includes the time given for the doctoral candidate to give a response. The time given to the opponents may, however, as appropriate, and following the decision by the chairperson, be restricted or extended.

Immediately after the defence, the opponents must be ensured the possibility of discussing and evaluating the course of the defence with a view to signing the report stating whether they found the defence to be satisfactory.

VI. Conferring

If the official opponents consider the defence to be satisfactory, the Academic Council will confer a doctorate to the author.

The author will then receive a doctoral letter as well as the sound recording of the defence. The plate for the doctor's ring may be requested by application to the University of Copenhagen, the University Administration, University Finance, email: oko-hovedkassen@adm.ku.dk. The ring and attachment of plate is available at the doctorate's own expense.

Doctoral candidates of the year are invited to the university's annual party.

VII. Rejection

If the faculty receives a recommendation from the evaluation committee that the thesis should not be approved for public defence, the recommendation will be submitted for consultation with the author, who will then be able to

- 1) withdraw the thesis, or
- 2) submit observations to the recommendation.

If the author chooses to withdraw the thesis, the author is granted the opportunity to revise and re-submit the thesis. However, the faculty is not obligated to subject the thesis to renewed evaluation.

If the author submits observations, these must be sent for consultation with the evaluation committee. The observations made by the author and the reply of the evaluation committee hereto must be presented to the Academic Council for consideration. If the council finds in favour of the author, the author will have the possibility to revise the thesis and re-submit it to the faculty with a request for renewed evaluation. However, the faculty is not obligated to subject the thesis to renewed evaluation.

If the public opponents have not found the defence to be complete, the Academic Council may decide to collect observations from any unofficial opponents. Such observations must be submitted for consultation with the author after which a final report may be drawn up. The final report will be submitted for consultation with the author. After this, the Academic Council will make its final decision on the award of the doctorate.