

RECOMMENDATIONS ON DOCTORAL TRAINING AT THE UNIVERSITY OF TURKU

The purpose of these recommendations is to improve the quality and effectiveness of doctoral and research training at the University of Turku. The objective is to pay attention to the reasonable allocation of teaching and supervision resources, and to ensure that students receive the supervision they need. In addition to the recommendations on doctoral training, the University should prepare recommendations to systematise postdoctoral research training. The training provided by the research collegia can be used to fulfil this aim.

The recommendations on doctoral training were originally prepared in a working group on doctoral training. After wide circulation for comment in the spring of 2009, these recommendations were finalised in a working group on research quality assurance. Definitions of policy presented in the recommendations are included in the new University of Turku Regulation on Studies, which came into effect on 1 August 2010. As part of developing doctoral training at the University of Turku, the Graduate School Working Group on Quality Assurance has examined the recommendations. As a result of these revisions, the recommendations on doctoral training better correspond to the quality criteria defined in the Academy of Finland call for applications for doctoral programmes 2012–2015. These recommendations formed the basis for the University of Turku Graduate School Handbook, which the Graduate School Working Group on Quality Assurance has prepared and the Graduate School Board discussed in its meeting on 4 February 2011.

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0. Background

Regulations concerning doctoral training:

Government Decree on University Degrees (794/2004):

Objectives of scientific and artistic postgraduate education (Section 21)

The aim of postgraduate education is that the student:

- 1) becomes well-versed in his/her own field of research and its social significance and gains knowledge and skills needed to apply scientific research methods independently and critically and to produce new scientific knowledge within his/her field of research;
- 2) becomes conversant with the development, basic problems and research methods of his/her own field of research; and
- 3) gains such knowledge of the general theory of science and of other disciplines relating to his/her own field of research as enables him/her to follow developments in them.

Requisite components of the doctorate degree (Section 22)

To be awarded a doctorate, the student must:

- 1) complete the required postgraduate studies; 2) demonstrate independent and critical thinking in the field of research; and 3) write a doctoral dissertation and defend it in public.

As a doctoral dissertation may also be approved a number of scientific publications or manuscripts vetted for publication deemed sufficient by the university which deal with the same set of problems and a paper summarising the findings or some other work which meets corresponding scientific criteria. The publications may include co-authored publications if the author's independent contribution to them can be demonstrated.

Admission

Universities Act (558/2009, Section 36)

The students shall be admitted by the university. A student is admitted to study for both a lower and higher university degree, for either of these, or for a postgraduate degree.

The university shall decide upon the admission criteria. Where it is impossible for the university to admit all the applicants owing to a restricted intake of students, the admission criteria applied must be consistent with regard to all the applicants. Applicants may be divided into separate groups in the selection on the basis of different educational backgrounds. In this case, the admission criteria applied must be consistent with regard to applicants belonging to the same group. For the purpose of meeting the educational needs of one language group, the consistent admission criteria may be departed from to a limited extent.

Eligibility for studies leading to a postgraduate degree

Universities Act (558/2009, Section 37)

Eligible for studies leading to an academic or artistic postgraduate degree shall be a person who has completed:

- 1) an applicable higher university degree;
- 2) an applicable higher polytechnic degree; or

3) an applicable education completed abroad which in the awarding country gives eligibility for corresponding higher education.

The university may require a student admitted to study for an academic or artistic postgraduate degree complete the necessary supplementary studies in order to acquire the knowledge and skills needed for the studies.

Eligible for studies leading to a professional postgraduate degree shall be a person:

- 1) who has completed an applicable higher university or polytechnic degree; or
- 2) who has an applicable education completed abroad which in the awarding country gives eligibility for corresponding higher education.

Further provisions concerning eligibility for professional postgraduate degrees shall be enacted by Government Decree.

Eligible for studies referred to in this Section may also be a person whom the university judges otherwise to have sufficient knowledge and skills for the studies.

The minimum requirements for doctoral training and dissertation in the University of Turku are described in the appendix to the Quality Manual.

1. Organisation of doctoral training

In the job structure for the University's teaching and research personnel, PhD Student is a job title. In these recommendations, however, a PhD student is defined as any student pursuing a doctoral degree.

1.1. University

University of Turku Graduate School coordinates and supports the activities of doctoral programmes operating within the University. Its objective is to guarantee the quality and smooth progress of doctoral training and to ensure that the supervision system is effective. For its part, the Graduate School ensures that doctoral programmes have adequate infrastructure and operational preconditions for carrying out doctoral training. It offers doctoral programmes multidisciplinary training including transferable skills and career planning. The aim is to educate researchers and experts of high quality.

The Director of the Graduate School is the Vice Rector in charge of research training. The operation of the Graduate School is administered by a coordinator. There is a Graduate School Board that monitors, supervises and evaluates doctoral and other research training, as well as their quality assurance at the level of the University. It also coordinates the cooperation between the faculties, for example, by organising joint teaching for PhD students (e.g., transferable/generic skills) and supervisors, and spreads good practices, for instance, through the web pages of the Graduate School. The Director of the Graduate School is the chairperson of the Board, which includes persons responsible for doctoral degrees in the faculties, as well as PhD student representatives.

The structure and methods of the University of Turku Graduate School are in accordance with the recommendations given by the Academy of Finland on developing doctoral training.

1.2. Faculty level

In these recommendations, a faculty means the faculties of the University of Turku and the Turku School of Economics.

Each faculty must have a **body** which plans, coordinates and develops doctoral training in the faculty. The faculty is responsible for accepting new PhD students, quality control,

agreeing common rules, as well as preparing decisions on permission for the public defence of the doctoral dissertation and the decisions on doctoral degrees.

It is recommended that doctoral training be organized as a **faculty doctoral programme** to which all the PhD students in a faculty belong. The doctoral programmes of the faculties are needed especially to serve the needs of the PhD students outside national doctoral programmes. There can be several field-specific doctoral programmes in a faculty. The purpose of the faculties' doctoral programmes is to provide systematic teaching and supervision for the PhD students, to organise joint meetings on doctoral training and to coordinate the doctoral training in the discipline or field of research. Each doctoral programme has a Director and a Board whose task is to coordinate and develop the operation of the doctoral programme.

1.3. Monitoring the progress of the doctoral dissertation and mentoring of the PhD student

It is recommended that each doctoral student has, in addition to a supervisor, a **mentor**, who can be a researcher in the post-doctoral phase. The task of a mentor is to assist a PhD student in formulating career plans, and to ensure that the doctoral training is sufficiently broad and generic skills are adopted, as well as to give a PhD student general support independent of a supervisor.

In addition, it is recommended that a **thesis advisory committee** (*seurantaryhmä*) is established for a PhD student in the initial stage of doctoral thesis work. A thesis advisory committee should consist of two or three researchers, in addition to the supervisor, who are conversant with the subject matter of the thesis. They should be from outside the research group to which a doctoral student may belong. A doctoral student can suggest members for his/her thesis advisory committee.

Based on the best type of action for each discipline and the needs and resources of the faculty, the faculties decide on how the monitoring and mentoring systems are realised and the procedures by which a thesis advisory committee and/or mentors are chosen.

2. PhD student admission

The right to pursue a doctoral degree is to be applied for from the faculty in which the research work mainly takes place. The faculties decide on the detailed grounds and procedures of student admission and accept students. Applicants are informed of the application procedures and admission criteria in advance.

2.1. Aims

The objective of the PhD student admission procedure is to select students who are suitable for a research career, and who are talented, motivated and committed to research and doctoral training. The aim is to evaluate the scientific thinking skills of the applicant, his/her ability to master the central concepts and models of the field as well as the skills necessary to define and solve scientific problems.

2.2. Admission criteria

In the main, students who have completed a higher university degree (usually a master's degree) or a comparable degree may be accepted for doctoral training. In accordance with Section 37, Paragraph 9 of the Universities Act, a person whom the university judges otherwise to have sufficient knowledge and skills may also be eligible for doctoral training. Thus, students who are talented and interested in research work, but have completed only the bachelor's degree, may be accepted for doctoral training in exceptional circumstances. In this way, they receive supervision and can participate in research groups at as early a stage as possible.

Admission is based on the applicant's previous study record (thesis and other major subject studies); research plan; study, financing and career plans; research experience, and other merits. The suitability and motivation of the applicant may be evaluated by an examination

and/or an interview. In addition, checks should be made to ensure that the applicant has adequate language skills for pursuing doctoral training.

The availability of supervision resources also affects an admission decision. A prerequisite for admission is that there is at least one person who has agreed to act as a supervisor and fulfils the qualification requirements.

2.3. Applying

The content of an application and the required attachments are defined in the admission criteria decided by the faculty. A research plan and a preliminary study plan (preliminary progress schedule and a plan on the content of the degree), as well as possible career and financing plans should always be attached to an application.

Quotas may be set for the number of students on the basis of degree targets or the educational needs of a field. In this case, selection is tied to application periods which take place at least once a year.

2.4. Handling of applications

The faculty body responsible for doctoral training handles the applications and prepares the PhD student admission procedure. The Dean of the Faculty / the Director of the Turku School of Economics accepts new PhD students in accordance with the University of Turku Rules of Procedure.

A right to study is not granted if the applicant does not fulfil the admission criteria or is not among the top applicants if quotas are set. Inadequate supervision or financing resources or a lack of suitable expertise in an applicant's research area may also lead to rejection. An applicant will be notified of the grounds for rejection and appeal instructions are attached to the decision. The appeal for rectification of student selection decisions is defined in the University of Turku Regulation on Studies (Section 9). In the administration of a rectification request, the results of PhD student selection may not be changed to the detriment of someone already admitted to doctoral training.

Whenever possible, those who apply for doctoral training but do not fulfil the admission criteria are given information on other study possibilities.

2.5. Rights to study

A PhD student may only hold one right to study for a doctoral degree at the University of Turku at a time.

In accordance with Section 8 of the University of Turku Regulation on Studies, a PhD student's right to study for the doctoral degree will be transferred to the passive register if he/she has not pursued related formal training or participated in supervision as agreed during the last three academic years. The right to study for the doctoral degree will also be declared passive if the PhD student has enrolled as a non-attending student or neglected to enrol during the last three academic years.

PhD students can have their right to study for the doctoral degree reactivated by preparing/updating their personal study plan (including a research plan) and submitting it for approval by the faculty.

For PhD students whose studies seem to have ceased completely, the faculties should recommend renouncing the right to study.

3. Content of degree

The doctoral degree comprises a doctoral thesis and related research. In addition, it consists of formal training, amounting to 40–60 ECTS credits, depending on the field.

The scope and supervision of the doctoral degree should be such that the degree can be completed in four years if working full-time. *Assistance given to those working part-time on their doctoral degree will be improved.*

Each PhD student must actively participate in the doctoral training offered by the graduate school / doctoral programme / faculty / department / subject. The faculties define the characteristics of active participation in more detail and these are included in the doctoral thesis supervision plan.

The formal training must support doctoral thesis work and provide the skills required for both a professional career in research and other positions of expertise.

In addition to the research work and related formal training, the degree consists of the philosophy of science, research ethics, international scientific activities and other courses on transferable/generic skills. The latter may include, amongst others, pedagogical skills; managerial, presentation, interaction and communication skills; entrepreneurship and project management skills.

The faculties will give clear descriptions of the grounds for determining grades for doctoral theses if they are evaluated otherwise than on a pass/fail grading scale.

4. Supervision and monitoring system

Supervision includes recruitment, admission, support for formal training and career planning, as well as academic supervision.

The research and supervision cultures of academic communities vary. The aim is to produce an environment that encourages creative thinking and innovativeness, where there are top-class researchers/supervisors and enthusiastic PhD students, internationally high-quality infrastructure, functional support services and efficient administration, as well as possibilities for peer work.

4.1. Supervision of doctoral thesis

The purpose of academic supervision is not only to support thesis work and formal training, but also to develop and encourage PhD students' critical and constructive scholarly thinking, to support their integration into the academic community and to advance the development of professional expertise.

The faculty appoints supervisors for the PhD student. The main supervisor of the doctoral thesis must be at least an adjunct professor (*dosentti*). The special expertise of adjunct professors and postdoctoral researchers should be utilised in supervision whenever possible. The Board of the Graduate School, for its part, takes care of organising training for supervisors that crosses faculty boundaries and brings synergistic benefits, as well as other support measures that help those who have completed a doctoral degree to become more competent supervisors.

A PhD student is expected to come to supervision meetings well-prepared, to produce the required materials, to be regularly in contact with his/her supervisor and the thesis advisory committee, and to complete the agreed tasks. PhD students must be committed to their research project by aiming at high academic quality and following research ethical codes. PhD students have an obligation to follow the schedules set and to work in collaboration with their supervisors and the thesis advisory committee.

Supervisors are obliged to commit themselves to regular supervision work and to advancing the research work of supervisees, as well as to assist supervisees in practices related to research work. Supervisors must reserve enough time for all supervisees and meet them regularly. Supervisors ensure the quality of the doctoral thesis manuscript and assess whether it is ready for pre-examination.

The faculties and doctoral programmes define in more detail those procedures by which the rights and obligations of both the PhD student and the supervisor are ensured.

4.2. Supervision plan

A plan for the supervision of a doctoral thesis is made. This supervision plan defines the responsibilities and obligations of the unit (faculty/department/subject and doctoral programme), the supervisor(s) and the PhD student, as well as their commitment to a cooperative relationship.

The supervision plan may also include, among other things, the principles for publishing articles and the practices in a research field/research group relating to authors' names and their order. Other matters that can be agreed on separately include the rights to inventions made in the research projects and patents.

Significant changes in the supervision plan are discussed in the thesis advisory committee or in the faculty body that coordinates doctoral training.

A supervision plan template is attached as an example.

4.3. Personal study plan (HOPS)

All PhD students prepare a personal study plan at the latest when their doctoral training begins. The content of the personal study plan is defined by the faculty. The personal study plan is a supervision tool for doctoral training and it helps the PhD student to reach a comprehensive understanding of the entity of the degree.. The study plan also gives support to the PhD student's independent decisions and his/her own responsibility for the progress of the doctoral dissertation.

The supervisor of a doctoral thesis approves the study plan and its implementation is regularly monitored, for example, in the meetings and reporting defined in the supervision plan. The personal study plan of a PhD student is updated throughout the whole period of doctoral training when needed.

4.4. Feedback and evaluation system

The progress monitoring of studies in the faculties will be extended to doctoral training. The feedback given by supervisors and thesis advisory committees can be utilised in monitoring progress. The faculties must pay special attention to the high quality of the doctoral theses, which is important for a professional career in research, a post-doctoral phase abroad as well as for other positions of expertise.

The faculties are responsible for systematically collecting feedback on doctoral training in cooperation with the academic career services of the University. The faculties are also responsible for maintaining placement surveys of those who have completed a doctoral degree. Feedback should be collected both from PhD students, doctoral graduates and central interest groups; this feedback must be taken into account in developing doctoral training.

4.5. Legal protection of PhD students

The procedures related to legal protection are defined in the University of Turku Rules of Procedure and Regulation on Studies, these include appeals against student admission decisions, decisions concerning the loss of the right to study and the assessment of completed courses or theses.

5. Doctoral dissertation

A table of current practices concerning the process leading to doctoral degree at the University of Turku is attached to the University's Quality Manual.

The faculties should adopt good practices concerning doctoral training and dissertation, taking into account also the discipline-specific national and international discussion.

6. Examples of good practices

- <http://www.aka.fi/en-GB/A/Science-in-society/The-research-career/Graduate-schools/>
Academy of Finland website on doctoral programmes
- <http://hum.utu.fi/tutkimus/taydentavatohteet.html>
The instructions of the Faculty of Humanities at the University of Turku include, among others, the grading scale for doctoral theses
- www.tubs.utu.fi/TuBS_Thesis_Advisory_committee_instructions.pdf
TuBS Thesis Advisory Committee instructions and a list of transferable skills in doctoral training
- <http://delicious.com/phdjaosto>
Links related to developing doctoral training