# UNIVERSITY OF EASTERN FINLAND DOCTORAL CURRICULA 2016-2017



# University of Eastern Finland

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# To the Reader

This is a guide for doctoral students at the University of Eastern Finland, their supervisors and those who are interested in pursuing doctoral degree studies. This guide contains all the instructions and guidelines which apply to doctoral education and doctoral students at the University of Eastern Finland. The regulations concerning individual faculties can be found on the faculties' own doctoral education websites.

The guidelines in this guide are valid during the academic year 2015-2016.

In addition to this curricula, information on doctoral education is also available from research supervisors, the faculty staff members who are responsible for doctoral studies, the university's research coordinator and the doctoral studies websites of the university and the faculties

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# 1 Applying

# 1.1 STUDY GUIDANCE AND ADMINISTRATION OF DOCTORAL STUDIES

The University of Eastern Finland's Doctoral School and the associated doctoral programmes are responsible for arranging scientific doctoral studies at the University of Eastern Finland. Doctoral students complete their licentiate or doctoral studies in one of the doctoral programmes. There are a total of 13 subject-specific or thematic doctoral programmes at the University of Eastern Finland. Administration of doctoral studies is the responsibility of the university faculties.

Study guidance for doctoral students is provided by directors of doctoral programmes, supervisors and the faculty personnel responsible for doctoral studies. Instructions can be found in this curricula, on the faculties' speficic doctoral studies webpages and on the websites of doctoral programmes.

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# UNIVERSITY OF EASTERN FINLAND'S DOCTORAL SCHOOL

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Faculties are responsible for the administration of doctoral studies. Faculties

- decide on requirements of doctorates
- approve the doctoral studies curricula
- grant the right to pursue doctoral studies, approve the research topic and research supervisor(s), research and doctoral study plans and any changes made to these
- appoint the preliminary and final examiners for doctoral dissertations and licentiate theses and the opponents and the chairman of the public examination (the Custos) for doctoral dissertations
- grant the permission for the public examination, approve and grade the licentiate thesis and the doctoral dissertation
- approve completed doctoral degrees and award the degrees.

The purpose of doctoral programmes is to coordinate the organisation of doctoral training in their field at the University of Eastern Finland. A doctoral programme

- processes applications and makes proposals on the rights to study to be granted
- is responsible for the organisation of subject-related doctoral studies
- is responsible for the supervision of doctoral students.

The University of Eastern Finland's Doctoral School coordinates doctoral education at the university and provides transferable skills studies to all of the university's doctoral students. All doctoral students are automatically included in the doctoral school. The director of the doctoral school is Academic Rector Jaakko Puhakka and the activities of the school are coordinated by Research Development Manager Anu Liikanen.

# 1.2 AIMS OF DOCTORAL EDUCATION

The aim of scientific doctoral education is to educate researchers and specialists to work independently.

The aim of doctoral education is that the student (Government Decree on University Degrees 794/2004 21 §):

- "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
- becomes conversant with the development, basic problems and research methods of his/her own field of research
- 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."

According to the European framework of qualifications doctoral degrees are awarded to students who:

- "have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field
- have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity
- have made a contribution through original research that extends the frontier
  of knowledge by developing a substantial body of work, some of which merits national or international refereed publication
- are capable of critical analysis, evaluation and synthesis of new and complex ideas
- can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise
- can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society" (A Framework for Qualifications of the European Higher Education Area, 67-68)."

# 1.3 DOCTORAL DEGREES OFFERED AT THE UNIVERSITY

Scientific doctoral education leads to either a doctoral or a licentiate degree. It is also possible to complete professional postgraduate degrees at the university. The doctoral degrees available at the University of Eastern Finland are listed in the following table.

# PHILOSOPHICAL FACULTY

# DOCTORAL PROGRAMME IN SOCIAL AND CULTURAL ENCOUNTERS

Doctor of / Licentiate in Philosophy

Doctor of / Licentiate in Theology

Doctor of / Licentiate in Arts (Psychology)

#### DOCTORAL PROGRAMME IN EDUCATIONAL STUDIES

Doctor of / Licentiate in Education

Doctor of / Licentiate in Philosophy

# **FACULTY OF SCIENCE AND FORESTRY**

# DOCTORAL PROGRAMME IN SCIENCE, TECHNOLOGY AND COMPUTING (SCITECO)

Doctor of / Licentiate in Philosophy

# DOCTORAL PROGRAMME IN ENVIRONMENTAL PHYSICS, HEALTH AND BIOLOGY (EPHB)

Doctor of / Licentiate in Philosophy

# **DOCTORAL PROGRAMME IN FORESTS AND BIORESOURCES (FORES)**

Doctor of / Licentiate in Science (Agriculture and Forestry)

Doctor of Philosophy

# **DOCTORAL PROGRAMME IN EDUCATIONAL STUDIES**

Doctor of / Licentiate in Science (Agriculture and Forestry)

Doctor of / Licentiate in Philosophy

# **FACULTY OF HEALTH SCIENCES**

# DOCTORAL PROGRAMME OF CLINICAL RESEARCH

Doctor of / Licentiate in Philosophy

Doctor of Dental Sciences

Doctor of Medical Science

Doctor of / Licentiate in Science (Pharmacy)

Doctor of / Licentiate in Science (Health care)

# DOCTORAL PROGRAMME IN DRUG RESEARCH

Doctor of / Licentiate in Science (Pharmacy)

Doctor of / Licentiate in Philosophy

**Doctor of Dental Sciences** 

Doctor of Medical Science

# DOCOTRAL PROGRAMME IN MOLECULAR MEDICINE

Doctor of / Licentiate in Science (Pharmacy)

Doctor of / Licentiate in Philosophy

**Doctor of Dental Sciences** 

Doctor of Medical Science

Doctor of / Licentiate in Science (Health care)

# **DOCTORAL PROGRAMME IN HEALTH SCIENCES**

Doctor of / Licentiate in Science (Pharmacy)

Doctor of / Licentiate in Philosophy

**Doctor of Dental Sciences** 

Doctor of / Licentiate in Science (Health care)

**Doctor of Medical Science** 

# **FACULTY OF SOCIAL SCIENCES AND BUSINESS STUDIES**

# PAST, SPACE AND ENVIRONMENT IN SOCIETY DOCTORAL PROGRAMME

Doctor of / Licentiate in Philosophy (Humanities and Natural Sci.)

Doctor of / Licentiate in Social Sciences

# **DOCTORAL PROGRAMME IN BUSINESS**

Doctor of / Licentiate in Science (Economics and Business Administration)

#### **DOCTORAL PROGRAMME IN LAW**

Doctor of / Licentiate in Law

Doctor of / Licentiate in Administrative Sciences (students who have started before 1.8.2013)

#### DOCTORAL PROGRAMME IN SOCIAL AND CULTURAL ENCOUNTERS

Doctor of / Licentiate in Philosophy

Doctor of / Licentiate in Administrative Sciences (students who have started before 1.8.2013)

Doctor of / Licentiate in Science (Economics and Business Administration)

Doctor of / Licentiate in Law

Doctor of / Licentiate in Social Sciences

#### DOCTORAL PROGRAMME IN WELFARE, HEALTH AND MANAGEMENT

Doctor of / Licentiate in Health Sciences

Doctor of / Licentiate in Social Sciences

# 1.4 ELIGIBILITY FOR DOCTORAL EDUCATION AND ADMISSION CRITERIA

According to the Universities Act of Finland (558/2009, Chapter 5, Section 37), those 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
- 3) 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.

The university may require that a person who has been accepted to pursue doctoral studies completes a necessary amount of supplementary studies to ensure that he/she is qualified to take part in doctoral studies. If the student applies for a doctoral study right in his/her major subject or in a subject in which he/she has completed advanced studies, he/she is generally eligible for doctoral studies in that subject. However, if the student applies for a doctoral study right in a field which has not been the main field of his/her Master's degree and his/her additional studies have not given him/her eligibility to pursue doctoral studies in the field to which he/she has applied, the faculty may require that the student completes supplementary studies. Possible supplementary studies are specified when the right to doctoral studies is granted. They cannot be included in the doctoral degree.

The admission criteria for doctoral programmes at the University are different for each programme. Programme-specific admission criteria are described in Chapter 2.2.

It is also possible to complete a professional licentiate degree at the university. Instructions on how to apply for the right to pursue studies for a professional licentiate degree can be found on the websites of the faculties.

# 1.5 APPLICATION PROCEDURE FOR THE RIGHT FOR TO DOCTORAL STUDIES

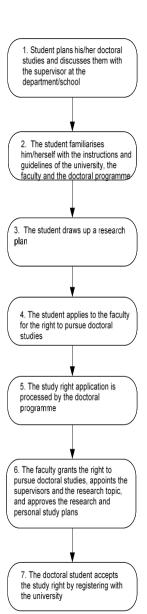
A doctoral study right is granted as a result of an application in which the applicant suggests supervisors and makes a personal doctoral study plan and a research plan. The criteria of eligibility for doctoral degree studies are described in Chapter 1.4. If the applicant is applying for a doctoral study right in a scientific field which is different from the main subject of his/her Master's degree, the applicant may be required to complete supplementary studies to become eligible for doctoral studies.

1. The prospective doctoral student discusses the possibility to pursue doctoral studies in the department or school with the potential supervisor(s) or with the coordinator/head of the doctoral programme. The right to pursue doctoral studies may be applied with the faculty between one and four times a year depending on the doctoral programme in question. During the academic year 2015-2016, the deadlines for applications are 30 September, 30 November, 28 February and 30 April. Programme-specific deadlines are listed in the descriptions of doctoral programmes (Chapter 2.2 Doctoral programmes). Study right from the Doctoral Programme in Science, Technology and Computing and Doctoral Programme in Environmental Physics, Health and Biology in

the Faculty of Science and Forestry can be applied throughout the year (those programmes do not follow the above-mentioned application deadlines).

- 2. The prospective doctoral student studies the instructions and guidelines concerning the doctoral programme issued by the university, the faculty and the programme. The university's guidelines and links to the faculties' doctoral education guidelines are available in this guide and at http://www.uef.fi/en/web/guest/research/doctoralschool/curricula-and-guidance
- 3. The prospective doctoral student discusses the research topic, doctoral studies and their completion, as well as other supervisors with the future main supervisor. Each doctoral student must have at least two supervisors. One of the supervisors must hold a professor's or a docent's title with the University of Eastern Finland or have a corresponding scientific qualification. (Faculty of Science and Forestry's specific guidelines concerning the qualification of supervisors can be found at: http://www.uef.fi/lumet/ohjeita-jatko-opiskelijoille). The prospective doctoral student and the supervisors must negotiate and agree on responsibilities and commitment to supervising the student's research project. The supervisors must give their written consent on the application form. The prospective doctoral student draws up a preliminary research plan. The doctoral student must indicate in the application the doctoral programme for which the student is applying the right to study.
- 4. The prospective doctoral student applies for the right to pursue doctoral studies using an application form available on the website of the doctoral school. The application, complete with the required signatures and attachments, shall be delivered to the faculty's Administration Service Centre. Application attachments:
  - a copy of the basic university degree certificate, and other documents which may affect the granting of a study right
  - a transcript of earlier academic records
  - a preliminary research plan approved by the main supervisor (for guidance, see 1.5.1)
  - if necessary, a statement from the Comittee on Research Ethics and a permission for the use of laboratory animals
- 5. The application for pursuing doctoral studies is processed by the relevant doctoral programme.

- 6. The faculty decides whether the right to pursue doctoral studies should be granted on the basis of a proposal made by the doctoral programme. When the right to study is granted, the faculty decides on any supplementary studies required, confirms the research topic, appoints the supervisors and approves the research plan and the personal doctoral study plans. The faculty communicates its decision to the applicant, the supervisors, the Student and Learning Services and the doctoral programme in question. Similarly, negative decisions and their justifications are communicated to the applicant, the supervisors and the doctoral programme. In addition, the applicant is provided with instructions on how to appeal the decision.
- 7. After having been granted the right to pursue doctoral studies, the student immediately registers as a doctoral student using a registration form which shall then be submitted to the Student and Learning Services. In subsequent academic years, the registration must be carried out by mid-September. Further information: http://www.uef.fi/en/opiskelu/lukuvuosi-ilmoittautuminen
- 8. Doctoral student must submit a personal doctoral study plan to the Faculty Administration Office within 3 months after receiving the study right.



#### 1.5.1 Research Plan

When applying for doctoral degree studies, a research plan must be enclosed with the application. The student prepares the plan with his/her supervisors, and it must be approved by them. The research plan must cover the entire licentiate thesis or doctoral dissertation. If the research topic and materials change substantially, a new plan must be made. If the changes are significant, approval must be sought from the faculty. The research plan is usually drafted in Finnish or English.

The research plan can include the following information, for example:

- Title of the research and the name and contact information of the postgraduate student
- 2. Background
- i. a short summary of the background to the research with necessary sources (including the theoretical and methodological basis)
- ii. a description of earlier research related to the topic
- iii. a description of what remains unknown about the research topic and an explanation of the research's relevance on a national and/or international scale
- 3. Aims
- i. the research hypotheses
- ii. the aims of the research clearly defined and presented
- 4. Materials and methods
- i. a description of the research methods and materials used, and the grounds for choosing the particular methods
- ii. a description of how the materials will be handled and used (also after the research has been completed)  $\,$
- iii. a working plan, a plan for different stages of the work
- 5. Schedule and funding plans
- i. a description and a schedule for the different stages of the work
- ii. the funding plan and funding sources of the research
- 6. The ethical aspects of the research
- i. the ethical aspects of the research (e.g. whether the research requires statements from ethics committees or statutory research permits; possible permits should be attached to the research plan)
- 7. Publication plan
- i. the means and mode of publishing and/or presenting the research results
- 8. Applications of research results

- i. an estimation of the applications and the social significance of the research results
- 9. References
- i. a list of the research field's principal literature used for the research
- 10. The names of the persons and units participating in the research project

# 1.5.2 Doctoral Study Plan

Each doctoral student makes a personal study plan with his/her main supervisor according to the degree structure of his/hers doctoral programme (see Chapter 2.2). The doctoral student must submit his/her personal study plan to the Faculty Administration Office within 3 months after the doctoral student has received the study right. An approved study plan can be altered following a proposal made by the student and the supervisor.

The personal study plan includes, for example:

- the doctoral degree's courses, their schedule and the modes of completing them
- possible complementary studies and their schedule
- the licentiate thesis or doctoral dissertation topic and research plan

# 1.5.3 Decision Appeals

Any applicant who is dissatisfied with the student selections may apply for a written rectification from the Board of Appeal of the University of Eastern Finland. The deadline for making the request for rectification is fourteen (14) days after the applicant has been notified of the decision. The request for rectification must be addressed to the Board of Appeal and delivered to the Registry Office of the University of Eastern Finland within the prescribed deadline. If the request for rectification is delivered after fourteen days, it will not be investigated.

# **Doctoral Studies**

# 2.1 UNIVERSITY REGISTRATION AND PRACTICAL MATTERS

# REGISTRATION

After being notified of receiving a right to pursue doctoral studies, new doctoral students register as students in the student register. A registration form is enclosed with the admission letter sent to new doctoral students by the faculty. The student completes the form and submits it to Student and Learning Services:

University of Eastern Finland University of Eastern Finland University of Eastern Finland

Student and Learning Services

Joensuu campus Kuopio campus Savonlinna campus

PO Box 111 PO Box 1627 PO Box 86

FI-80101 Joensuu FI-70211 Kuopio FI-57101 Savonlinna

The form is only used for first-time registration. In subsequent years, registration takes place through WebOodi, by telephone, by email or by visiting the Student and Learning Services.

The registration period for the next academic year must be done by 15 September. It is necessary to register at the university each year in order to maintain the study right. No registration fee is charged. An approved registration as a doctoral student is required before e.g. study credits can be entered into the study register.

If a student has failed to register with the university during the registration period (by 15 September), he/she must submit a written application for the right to re-register (Universities Act 558/2009, Section 39). The re-registration fee, which also applies to doctoral students, is 35 euros (laid down in the decree of the Ministry of Education 737/2007). Re-registration mainly takes place by visiting Student and Learning Services. It is also possible to register by phone or by email. In this case, the re-registration payment receipt should be sent to Student and Learning Services by post.

Registration instructions are available at: http://www.uef.fi/opiskelu/opiskeluoikeus.

#### USER ACCOUNTS

At the University of Eastern Finland, a user account is created automatically for all new students and employees. A user account can be activated after a student has been registered as an attending student.

A username is required to access the university's intranet services and WebOodi. WebOodi is a tool for managing one's studies, such as registering for courses and exams, and for monitoring the process of one's studies. Having a user account also enables online access to scientific journals to which the university has subscribed. Students are notified of scholarships and their application procedures via the intranet. A number of university forms are also accessed this way.

Students who have completed their Master's degree in the University of Eastern Finland can use their former UEFAD user account also during their doctoral studies. The user account must be activated online by using one's personal online banking account. For further information on activating the user account, see http://www.uef.fi/tike/ueftunnuksen-aktivointi

For more instructions related to user accounts, please contact the IT Centre:

- Service request form: http://www.uef.fi/tike/palvelupyyntolomake
- servicedesk@uef.fi
- Telephone: +358 294 4 58880

# 2.2 DOCTORAL PROGRAMMES – ADMISSION CRITERIA AND STUDY REQUIREMENTS

At the University of Eastern Finland, scientific doctoral studies have been arranged as doctoral programmes since the beginning of 2013. All doctoral students are selected to attend a specific doctoral programme, and they pursue doctoral studies according to the requirements of the programme.

A student who has been accepted to pursue doctoral education can also complete a licentiate degree. For the licentiate degree one has to complete the specified amount of studies which the university requires as well as any possible specialisation studies included in the degree. The licentiate degree includes also a licentiate thesis in which the student demonstrates his/her knowledge of the research field and his/her ability to apply the methods of scientific research in practice independently and critically.

According to Section 22 of the Finnish Government Decree on University Degrees 794/2004, to be awarded a Doctoral Degree, the postgraduate student must:

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

The doctoral or licentiate degrees that can be completed in a doctoral programme have been listed under each programme. The following section provides details on the admission criteria for the doctoral programmes at the University of Eastern Finland and the structure of the degrees in each faculty.

# 2.2.1 Philosophical Faculty

# 2.2.1.1 Doctoral Programme in Social and Cultural Encounters

The Doctoral Programme in Social and Cultural Encounters is an international multidisciplinary programme jointly organised by the University of Eastern Finland's Faculty of Social Sciences and Business Studies and the Philosophical Faculty. The programme is aimed at the faculties' postgraduate students pursuing studies in a range of fields and focusing their research on cultural and social phenomena in changing environments. The doctoral programme has the following thematic areas:

- Life course, work and education
- Cultural and language encounters
- Natural resources, the environment and society
- Borders, mobility and Russia
- Social and cultural turning points
- Theology

Research on <u>life course</u>, <u>work and education</u> examines the human life course and its changes in terms of interaction between individual agency, cultural meanings and social institutions and structures. Research topics cover the study and development of education, guidance, advice and other interventions that support an individual's capacity to act.

Doctoral education in <u>cultural and language encounters</u> offers a wide range of opportunities for research in linguistics, cultural studies, translation studies and social studies. The programme emphasises empirical fieldwork, the analysis and interpretation of

text and oral corpora, and connections between methodology and theory formulation in humanistic sciences and their closely related disciplines. In <u>cultural disciplines</u>, fields of research include cultural phenomena, practices, relationships and differences (such as traditions, environments, literature, music and other arts, interaction, borders) and their transformations in locally, nationally and globally changing environments. In <u>language studies</u>, the doctoral programme particularly emphasises the study of linguistic contacts, changes and variation, cognitive and language technology research, and the study of language acquisition. Research in translation studies covers areas such as translations as manifestations of cultural interaction, cognitive processes in translating and interpreting, and globally and locally transforming practices and cultures of translation.

<u>Natural resources</u>, the environment and society offers doctoral students an opportunity to join an international and multidisciplinary doctoral programme for social and cultural research in natural resources and the environment. In this thematic area, special interests include the sustainable use and management of natural resources, issues concerning the climate and energy, global environmental challenges, national and local environmental management, and human relationships with nature and animals.

Borders, mobility and Russia emphasises (in addition to state borders) the social processes related to cultural and symbolic borders. Key research subjects in this area include border control and security, nationalism, ethnic and national identities and conflicts, historical and sociological state formation, Finland's and Europe's borders and neighbourhood, and critical geopolitics. Further subjects include everyday life and development in border areas, and a range of cross-border phenomena, such as migration, cross-border cultural, economic and political interaction, and tourism. The key geographic areas are Russia, Eurasia, Northern Europe, the Arctic regions, and the eastern border and the border areas of Finland and the European Union. Students whose research examines key processes related to borders, migration and cross-border phenomena in other geographic areas may also be accepted onto the programme.

<u>Social and cultural turning points</u> are studied in contexts where social structures, such as class, gender, geographical area, migration and methods of social control are entwined with human endeavour, everyday life, signification and agency in changing circumstances. The special research subjects are cultural and social relations and differences, approached from the perspectives of tradition, literature, music and other forms or arts, education, work and care-giving.

Doctoral education in <u>Theology</u> provides a range of opportunities to conduct research in all areas of Orthodox and Western theology. In addition to the shared roots of various Churches, such as the Bible and patristics, the research subjects cover themes such as the meeting of Eastern and Western religious traditions and mental and spiritual wellbeing.

# DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

Students of the Philosophical Faculty: Doctor of / Licentiate in Philosophy, Doctor of / Licentiate in Theology, Doctor of Philosophy (Theology), Doctor of / Licentiate in Arts (Psychology)

Students of the Faculty of Social Sciences and Business Studies: Doctor of / Licentiate in Philosophy, Doctor of / Licentiate in Science (Economics and Business Administration), Doctor of / Licentiate in Philosophy, Doctor of / Licentiate in Administrative Sciences (students who have started before 1.8.2013), Doctor of / Licentiate in Science (Economics and Business Administration), Doctor of / Licentiate in Law, Doctor of / Licentiate in Social Sciences

# ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

The Doctoral Programme in Social and Cultural Encounters meets the general requirements applied by the faculties participating in the programme and the University of Eastern Finland's Doctoral School concerning eligibility of doctoral studies and application for the right to pursue doctoral studies. Students admitted to pursue postgraduate studies must have completed a Master's degree with good grades and have submitted a research plan.

A relevant Master's-level degree completed abroad is considered to correspond to a Finnish Master's degree. Degrees completed in countries that have signed the Bologna Declaration are accepted as such. Degrees completed in other countries are assessed on a case-by-case basis. The faculty/doctoral programme may require complementary studies equivalent to 15-60 ECTS, which will be included in the applicant's postgraduate study plan. The required complementary studies are indicated in the decision concerning the student's right to pursue doctoral studies and cannot be included in the postgraduate degree.

For entry to the degree in Arts (Psychology), the applicant must have completed a Master's degree majoring in psychology or another corresponding degree and providing the applicant with a professional licence to work as a psychologist.

To be accepted, applicants must have completed advanced studies, achieving a grade of "good" or higher in the major subject of their Master's degree or in a relevant related subject, or must have completed a polytechnic Master's degree with a grade of "good" or higher in a relevant subject. The applicant's Master's thesis or a corresponding final paper must have also been awarded a grade corresponding to "good" or higher (cum laude approbatur or 3/5). If the applicant's earlier degree does not include a Master's thesis or a corresponding final paper or its grade is lower than that mentioned above, the leadership group of the doctoral programme will assess whether the applicant can present academic merits (such as publications or research assignments) in support of his or her admission. The acceptability of additional merits will be assessed by the professor of the academic subject in question. Acceptable merits also include evidence of any previous research projects, such as work as a researcher, published research papers and any research funding obtained.

# HOW TO APPLY

Applicants must apply for the right to pursue doctoral studies by submitting an application in writing to the appropriate faculty. The faculty in question grants the right to pursue doctoral studies, appoints research supervisors and approves research plans. The approval of the professor who has agreed to act as the supervisor should be attached to the application. Please note that applicants should therefore discuss their doctoral studies and the supervision of their doctoral dissertation with the prospective supervisor BEFORE applying for the right to pursue studies. For further instructions, please consult section 1.5.

Applicants must attach a research plan, a copy of basic university degree certificate and a copy of the transcript of previous studies into their application. Applicants must indicate their target degree and major subject in the application form.

The management group of the doctoral programme assesses the applications and makes proposals concerning their approval or rejection. The research plan is the key basis for student admission. The research plan must be completed in accordance with the instructions issued by the University of Eastern Finland. The assessment emphasises the clarity and innovativeness of the research plan, the feasibility of the research project, and the scientific relevance and suitability of the subject within the doctoral programme's profile.

The leadership group of the doctoral programme approves the research plan. Another admission criterion is that one or more supervisors can be found for the student's licentiate thesis or doctoral dissertation from the doctoral programme. The supervisor must be a professor, docent or a person with the equivalent qualifications. At least one of the supervisors must be a member of staff at the University of Eastern Finland. The post-graduate amanuensis will verify that the applicant's previous qualifications meet the eligibility criteria laid down in section 37 of the Universities Act (557/2009). The doctoral programme will verify the eligibility of the contents of the applicant's previous qualifications.

Students must submit their postgraduate study plans, approved by the supervisor, to the postgraduate amanuensis within three months of having been awarded the right to pursue doctoral studies.

# **DEGREE STRUCTURE AND STUDY REQUIREMENTS**

With regard to the provision of education and instruction, the most broad-ranging activities include seminars and lectures intended for all students admitted to the programme, and a thematic graduate school held annually. The most intensive instruction is given within the research groups arranged around the supervisors. The languages of instruction on the doctoral degree programme are Finnish and English.

Studies towards a licentiate or doctoral degree to be completed on the doctoral programme consist of three parts: a licentiate thesis or a doctoral dissertation, transferable skills studies (10-15 ECTS) and studies in the discipline and field of research (35-40 ECTS); the overall scope of the studies is 50 ECTS. The required volume of studies in the discipline and field of research and transferable skills studies depends on the degree pursued.

# Doctoral studies supporting research or professional competency, 50 ECTS

The doctoral programme includes transferable skills courses, which support research in all academic subjects, and a biannual seminar. The thematic areas of the programme include discipline-specific seminars and lectures. Transferable skills studies supporting research should be selected from the range of courses approved by the supervisor and offered by the UEF Doctoral School and faculties, and from the courses provided by national and international postgraduate education networks.

# 1. Transferable skills studies (10-15 ECTS)

After completing the transferable skills studies, doctoral students will be familiar with the ethical principles of research and able to discuss their special field of expertise in Finnish and/or in English. A mandatory course in research ethics (1 ECTS) must be included in the studies, or the student must prepare an essay or sit a book exam on the topic of research ethics. Students can select the remaining transferable skills studies (9-15 ECTS) from the range of courses offered by the doctoral programme and the UEF Doctoral School, such as Orientation for doctoral candidates, Conference English, Principles of academic presentation, courses in spoken and media presentation, and courses in publication, project management and the assessment of academic research, information retrieval etc. We recommend that students include academic writing and language studies in their course selection. Please consult WebOodi for the current course lists.

# 2. Studies in the discipline and field of research (35-40 ECTS)

Studies in the discipline and field of research reinforce the knowledge students have obtained of their academic field and theoretical and methodological skills gained during the completion of their previous qualification, and provide the capability to execute duties requiring in-depth academic expertise both in and beyond academia. The intention behind the doctoral programme is that students choose courses related to their specific field of study and sit book exams or prepare essays on more than one discipline represented in the doctoral programme. In their studies within the discipline and field of research in question, students can include the writing and publication of articles, book reviews and other academically eligible print and online texts for academic journals and anthologies. However, articles published in a doctoral dissertation consisting of articles cannot be counted towards studies in academic publishing.

Doctoral studies seminar (10 ECTS)
Methodological studies (5-10 ECTS)
Academic and other working life skills (5-10 ECTS)
Participation in scientific conferences (1-3 ECTS)
Studies in the discipline and theme of research (5-10 ECTS)
Scientific publishing (1-10 ECTS)

# Doctoral Dissertation or Licentiate Thesis

Students who proceed to complete a doctoral degree directly after receiving a Master's degree must complete the transferable skills studies and studies in the discipline and

field of research before the doctoral dissertation is submitted for preliminary examination. If the student has an applicable licentiate degree, no other studies apart from the doctoral dissertation are required in order to complete a doctoral degree. The form, requirements and assessment of a doctoral dissertation or a licentiate thesis must meet the requirements of the faculty in which the degree is completed.

The doctoral degree programme has a director, a deputy director and a leadership group with representatives from the participating faculties, departments, schools and doctoral students. The leadership group plans the broad outline of the educational provision, proposes students for admission onto the doctoral programme and promotes local, national and international collaboration between doctoral degree programmes. During the 2015-2016 academic year, the group has the following members:

- Professor Leena Koski (deputy: Professor Helmi Järviluoma-Mäkelä)
- Professor Katri Komulainen (deputy: Professor Vilma Hänninen)
- Professor Kaisa Koskinen (deputy: University Lecturer Helka Riionheimo)
- Professor Lauri Thurén (deputy: Professor Antti Raunio)
- Research Manager Joni Virkkunen (deputy: Maria Lähteenmäki)
- Student member (to be selected)

The contact for the doctoral programme is Professor Leena Koski (deputy: Professor Helmi Järviluoma-Mäkelä).

# 2.2.1.2 Doctoral Programme of Educational Studies

The Doctoral Programme in Educational Studies offers research training for postgraduate students pursuing licentiate and doctoral degrees in the field of education, including home economics and craft science. The research themes of the doctoral degree programme cover education, training, teaching, learning, development and instruction, learning environments and teacher education. The themes may also be related to well-being and social and cultural questions in the context of education and training. The Doctoral Programme in Educational Studies provides an opportunity for multidisciplinary and multimethodological research in education.

The disciplines included in the doctoral programme are science of adult education, special education, educational science, home economics, craft science and early childhood education

The doctoral programme is also open to doctoral students pursuing a doctorate in mathematics and science, and mathematics and forest sciences if the theme of their licentiate thesis or doctoral dissertation is related to the research topics of the doctoral programme.

#### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

Students of the Philosophical Faculty: Doctor of Philosophy, Doctor of / Licentiate in Education.

Students of the Faculty of Sciences and Forestry: Doctor of / Licentiate in Science (Agriculture and Forestry), Doctor of / Licentiate in Philosophy.

# ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

Students eligible to pursue doctoral studies in the Doctoral Programme in Educational Studies must have completed a Master's degree with science of adult education, special pedagogy, education, home economics or craft science as their major subject or completed advanced studies in any of these subjects. Applicants who have completed any other relevant Finnish Master's-level qualifications, including polytechnic Master's degrees, may also apply for the doctoral programme.

Prospective students who apply for the right to pursue a doctoral degree in the Philosophical Faculty and who have a Master's degree in a subject other than adult education, special pedagogy, education, home economics or craft science, and whose additional studies have not given them eligibility to pursue postgraduate studies in the field for which they have applied, may be asked by the faculty to complete between 15 and 60 ECTS in supplementary studies upon a proposal by the Doctoral Programme in Educational Studies. Applicants who change their major subject may also be asked by the faculty to complete between 15 and 60 ECTS in supplementary studies upon a proposal by the Doctoral Programme in Educational Studies. Applicants who have completed a polytechnic Master's degree will supplement their studies according to a proposal submitted by the doctoral degree programme, in order to meet the criteria for one of the above-mentioned Master's degrees. The scope and extent of any supplementary studies will be specified when the right to doctoral studies is granted. Supplementary studies cannot be included in the doctoral degree.

The doctoral degree programme is also open to applicants who have completed a relevant Master's degree abroad, providing eligibility in the awarding country for corresponding studies leading to a postgraduate degree. The degree must be completed in a

field corresponding to the major subject of the doctorate, and must be completed by the end of the application period. A Master's degree completed abroad is considered to correspond to a Finnish higher university degree. Degrees completed in countries that have signed the Bologna Declaration are accepted as such. Degrees completed in other countries are assessed separately on a case-by-case basis.

Applicants are expected to have proficiency in Finnish or in English sufficient for producing a clear research plan, participating in education and communicating with the university staff without difficulty. Upon submitting the application for the right to pursue studies, applicants may be asked to prove that they have the required proficiency in one of these languages.

Students admitted to pursue doctoral studies in the Doctoral Programme in Educational Studies within the Philosophical Faculty must have completed advanced studies in which they have achieved the grade "good" or higher in the major subject of their postgraduate studies, in an applicable related subject or in other equivalent studies. The applicant's Master's thesis or an equivalent final paper must have achieved a grade corresponding to "good" or higher (i.e. at least cum laude approbatur or 3/5). If the applicant's earlier degree does not include a Master's thesis or an equivalent final paper or its grade is lower than that mentioned above, the applicant's performance will be assessed on the basis of the grades in the qualification certificates and other evidence considered by the lead supervisor.

Students applying for the right to pursue studies in the Faculty of Science and Forestry and the Faculty of Health Sciences will be assessed based on the admission criteria of the respective faculty. In addition to a relevant Master's degree, applicants are expected to have a subject teacher's qualification in physics, chemistry, mathematics or computer science and, in the case of the forest sciences, a vocational teacher's qualification or equivalent studies. Topics of postgraduate studies in physics, chemistry, mathematics and computer science are related to learning, teaching or teacher education in these subjects. Correspondingly, research topics in forest sciences and social pharmacy are concerned with questions of teaching and learning in these fields.

Admission to doctoral education is based on the above-mentioned studies and a research plan approved and recommended by the doctoral programme. The leadership group of the Doctoral Programme in Educational Studies will assess the quality of the applicant's research plan and its relevance to the re-search topics of the programme. In addition, the faculty must have the expertise required to supervise the licentiate thesis

or doctoral dissertation and the applicant must have a lead supervisor who has agreed to commit to the project. The lead supervisor must be a member of staff in the faculty in which the postgraduate student is pursuing their degree, and a professor, a docent or a person with equivalent academic qualifications at the University of Eastern Finland.

#### HOW TO APPLY

The application procedure for the right to pursue doctoral studies is described in section 1.5. The right to pursue doctoral studies is granted upon application. The application must include the details of the lead supervisor, and any other supervisors if known, the research plan and copies of qualification certificates. The Doctoral Programme in Educational Studies is open to admissions twice a year. Applications must be submitted by the end of April or the end of November. Applicants must indicate their target degree and major subject in the application form.

Students must submit their postgraduate study plans, approved by the main supervisor, to the postgraduate amanuensis within three months of having been awarded the right to pursue doctoral studies.

# DEGREE STRUCTURE AND STUDY REQUIREMENTS

Scope of studies by target degree:

Degree	General Tranferable Skills Studies	Studies in the discipline and field of research	Total
Licentiate or Doctor of Education, and Licentiate or Doctor of Philoso- phy majoring in science of adult edu- cation, special pedagogy, craft sci- ence or home economics	10	40	50
Licentiate or Doctor of Philosophy majoring in physics, chemistry or mathematics	10	20	30
Licentiate or Doctor of Science (Agri- culture and Forestry) and Licentiate or Doctor of Philosophy majoring in forest sciences	10	30	40

# **CONTACT PERSONS**

Professor Leena Holopainen, Professor Pertti Väisänen, Docent Pekka Hirvonen, Professori Timo Tokola

# 2.2.2 Faculty of Science and Forestry

The doctoral programmes and degrees available in the Faculty of Science and Forestry are listed in Chapter 1.3. The admission criteria for the doctoral programmes and the structure of the degrees are described in the following chapters.

Foreign applicants applying to any of the doctoral programmes in the faculty must demonstrate sufficient proficiency in English when submitting their application. The sufficient proficiency can be demonstrated by providing evidence of any of the following:

- PTE (Academic) passed with at least 59 points, or
- TOEFL with PBT passed with at least 580 and writing passed with at least 4/IBT 90 and writing passed with at least 22, or

- IELTS (Academic) with an overall score of at least 6.5 and writing passed with at least 5.5
- the applicant has completed all prior studies in English. If the applicant has
  completed the prior studies in English, he/she must attach to the application
  a statement from the educational institution indicating that the language of
  instruction was English; or
- the applicant has completed the English test of the Finnish matriculation examination (IB Diploma or English as A1 language); or
- the applicant has completed primary education in English in Australia, Canada, New Zealand, the United Kingdom or the United States.

# 2.2.2.1 Doctoral Programme in Science, Technology and Computing (SCITECO)

The Doctoral Programme in Science, Technology and Computing combines science with computational analysis and technology to form a multidisciplinary programme. The computational component includes computing sciences, mathematical analysis and scientific computing. Science and technology combine photonics, chemistry and medical physics and technology. The purpose of the doctoral programme is to provide students with the competences required to create new knowledge, apply scientific research methods in a critical manner and independently, and to work in demanding expert and research positions in academia, business and the public sector.

On the programme, students can complete a doctoral degree in the following fields of science and research: photonics, computer science, mathematical analysis and scientific computing, chemistry, medical physics and technology. Research conducted in internationally acknowledged research groups forms a key part of the studies. Students will benefit from wide-ranging networking opportunities during their studies.

#### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The degrees available in the doctoral programme are Doctor of Philosophy and Licentiate of Philosophy.

# ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

In addition to the general eligibility criteria for pursuing doctoral studies (described in section 1.4), the previous studies required for the doctoral degree programme are as follows:

Discipline/field of research	Relevant previous qualifications
Photonics	Physics, optics, photonics, technical sciences or another relevant field (with sufficient knowledge of mathematics)
Computer science	Computer science, technical sciences or applied mathematics
Chemistry	Chemistry, technology of chemistry
Medical physics and technology	Applied physics, material science, mathematics, informatics or another relevant field

The admission criteria for non-Finnish-speaking applicants in terms of language proficiency are described at the beginning of section 2.2.2.

# **HOW TO APPLY**

The most important admission criteria for doctoral studies are the student's performance in previous studies, a plan of the intended research (preliminary plan) of no longer than one page, a motivation letter and, where required, an interview.

The following documents must be submitted with the application: a copy of the qualification certificate, transcript of studies, CV, plan of the intended research, motivation letter and, where available, personal references. The application must include the written consent of at least two supervisors. At least one of the supervisors must be a professor, or a senior researcher with a docent's qualification, at the University of Eastern Finland.

The doctoral programme is open for admissions throughout the year. Admission rounds for university-funded graduate school positions are announced separately. In most cases, applications for supported positions are submitted once a year in the autumn

# DGREE STRUCTURE AND STUDY REQUIREMENTS

Overall scope of studies required for pursuing a doctoral degree: 30 ECTS. Transferable skills courses 8-10 ECTS, including a compulsory course on Research Ethics (I ECTS) or other corresponding studies on research ethics. Studies in the discipline and field of research 20-22 ECTS.

A doctoral dissertation can be a scientific account based on independent research, which is regarded as increasing knowledge in the field in question (a monograph). A doctoral dissertation can consist of a sufficient number, determined by the university, of scientific publications discussing the same set of problems (article-based or compiled dissertation). They can be either published or intended/accepted for publication, and they are outlined in a separate summary.

Within the faculty, the structure of an article-based or compiled doctoral dissertation is as follows:

- a doctoral dissertation in the form of a collection of research articles typically
  contains 3-5 peer-reviewed scientific articles, of which at least two or at least
  50% must have been published or approved for publication in international,
  scientific peer review series;
- the dissertation must include an account of the author's contribution to joint publications.

The degree must include studies in the discipline and field of research in question, mainly at the advanced level of studies and supporting the research efforts. The studies may also include courses from other faculties, doctoral degree programmes and universities, including summer schools, seminars, book exams, conference presentations or other work, where these support the research efforts. Students are encouraged to take at least two months to conduct part of their work at a university abroad, a sector-specific research institution or a company. The main supervisor assesses the relevancy of completed work from the perspective of the studies as a whole.

Studies in the programme by research fields are listed below.

**Photonics**. The studies in the discipline and field of research:

Course	(ECTS)	2015-2016	2016-2017
3313003 Post Graduate Seminar in Photonics	4	X	Х
3313005 Advanced Biomedical Optics	4	Х	-
3313004 Optical Metrology and Fabrication	4	Х	-
3313007 Commercializing high-tech, like photonics	4	-	Х

3312031 Spectral Imaging Devices	5	Χ	Х
3312025 Display Technologies	5	Х	Х

# **Computer Science**. The studies in the discipline and field of research:

Course	ECTS
3621511 Design and Analysis of Algorithms *	6
3621595 Big Data and Cloud computing (advanced)	5
3621556 Biosequence Algorithm	5
3621557 Digital Speech Processing	5
3621517 Pattern Recognition	5
3621586 Advanced Course in Human-Computer Interaction *	5
3621584 Innovative Collaboration for Development	3
3621545 IT Service Management *	5
3621587 Eye tracking *	5
3621519 Advanced databases	5
3621599 Advanced data analytics - ecosystems (advanced)	5
3621589 Advanced data analytics*	5
3621590 Advanced data analytics - methods (advanced)	5
3621596 Advanced data analytics - interpretation (advanced)	5
3621521 Technologies for Development and Education	5
3621543 ICT for Development) *	5
3621551 Research Methods in Cognitive Phenomena *	5

3621518 Machine Vision	5
3621538 Learning Laboratory at School	5
3621554 Image analysis and processing	5
3621549 Usability Engineering	5
3621533 User Centered Design	5
3621562 Basics of qualitative research	5
3621534 Wireless Communication	5
3621520 Computational Color *	5
3621553 Computational Intelligence II *	5
3621598 Natural User Interfaces	5
3621570 Medical Image Analysis	5
3621546 Mental Representations in IT Education	5
3621523 State-of-Art Technologies in Education *	5
3621644 Deriving Programs *	5
3621516 Software Architectures and Design Patterns	5
3621645 Software Maintenance and Evolution *	5
3621548 Software Metrics	5
3621558 Software Design	5
3621529 Software Process Management	5
3621512 Software engineering *	6
3621524 Empirical Studies of Programming	5
3621527 Cognitive Theories in Learning Programming	5

3621539 Creative Problem Management *	5
3621522 Study Log	6
3621542 Design Methods in Educational Technology	5
3621541 Implementation Technologies for Learning Environments	5
3621547 Location-aware mobile applications development	5
3621514 Design of Spatial Information Systems	5
3621585 Advanced topics on project management	5
3621532 Project management laboratory	5
3621564 Speech technology workshop	5 - 8
3621530 Structured-Document Processing Languages*	5
3621528 Parallel Computing	5
3621550 Seminar in Parallel Programming	3 - 5
3621552 Clustering Methods	5
3621560 Oral Presentation Seminar	5
3621540 ICT Ethics	5
3621544 The Philosophy of Computer Science	5
3621513 Research Methods in Computer Science *	6
3621531 Testing Software Systems *	5
3621561 Research Methods in Information Systems	5
3621559 Database Management Systems	5
3621526 Tietoturva (Data Security)	5
3621712 Postgraduate Research Seminar (Computer Science)	1 - 5

3621515 Requirements engineering and Modeling	5
3621537 Practicum in online teaching	5
3621569 Web Data Management	5
3621525 Seminar on Computational Intelligence	2

# **Chemistry**. The studies in the discipline and field of research:

Course	ECTS	2015-	2016-
		2016	2017
3410302 Physical Methods in Inorganic Chemistry	4	Х	
3410303 Organometallic Chemistry	4		X
CTTOGGG Grganomotaling Chemicary	•		^
3410360 Theoretical Inorganic Chemistry	4	Х	
3410305 Theoretical Chemistry	4		Х
3410307 Molecular Modelling	4		
3410307 Molecular Modelling	4		Х
3410308 Surface Chemistry	4	Х	
3410309 Kinetics	4		Х
·			
3410310 Principles in Materials Science	4	X	
3410311 Special Materials	4		X
C 1750 17 Opostal materials	•		^
3410312 Catalytic Materials	4	Х	
3410313 Polymer Chemistry	4		Х
3410314 Theoretical Organic Chemistry	4		X
5410514 Theoretical Organic Orientistry	7		^
3410315 Structures of Proteins	4	Х	
3410316 Basic Principles of Mass Spectrometry	4		Х
0440005 Observictors of Biofred			
3410365 Chemistry of Biofuels	4	Х	

3410333 Practical Molecular Modelling	3		X
3410334 NMR spectroscopy	3	Х	Х
3410335 X-Ray Diffraction	3	Х	
3410336 Characterization Methods for Polymers	3	х	
3410363 Practical methods of organometallic chemistry	3		Х
3410317 Biological Mass Spectrometry	3		х
3410411 Licentiate Seminar	2		
3410401 Licentiate Examination in Inorganic Chemistry			
3410402 Licentiate Examination in Physical Chemistry			
3410403 Licentiate Examination in Materials Chemistry			
3410404 Licentiate Examination in Organic Chemistry			

# **Medical Physics and Engineering**. The studies in the discipline and field of research:

Course	ECTS	2015- 2016	2016- 2017
3352571 Biomaterials	5		Х
3352575 Biomechanics	5		Х
3352573 Characterization of Materials	5	Х	
3351552 Data Analysis	5	Х	Х
3356509 Differential Equations a	5	х	х
3356510 Differential Equations b	4	Х	Х
3352541 Digital Image Processing	5	Х	
3352610 Estimation Theory	5	х	

3352603 Finite Element Methods	5	Х	
3352612 Image Analysis	5		Х
3352604 Inverse Problems	5		Х
3352577 X-ray power diffraction	5		Х
3352545 Magnetic Resonance Imaging	5	Х	
3352572 Material techniques	5		Х
3352576 Medical Approval Process	5	Х	
3352543 Medical Signal Analysis	5	Х	
3352574 Nanoparticle technology	5	17-18	
3352503 Nuclear Medicine Physics	5	Х	
3356504 Numerical methods	5		Х
3352601 Optimization	5		Х
3356512 Partial Differential Equations	5	Х	
3352615 Physical Acoustics	5		Х
3352501 Physics in Clinical Radiology	5		Х
3352502 Physics in Radiotherapy	5		Х
3353311 Research seminars on Medical Physics and Technology	2	х	Х
3352542 Signal Analysis	5	Х	Х
3351555 Transport Phenomena	5	Х	Х
3352609 Statistical Inverse Problems	5	Х	
3352544 Ultrasound Techniques in Medicine	5	Х	
4487104 In vitro and in vivo imaging	4		

4138120 Book Exam, Biomedical NMR	1-8	
4138102 Biomedical NMR Research Seminars	2-4	
4138112 MRI Workshops	1-3	
4138113 Optical Imaging Workshops	1-3	

**Mathematical Analysis and Scientific Computing**. The studies in the discipline and field of research:

Course	ECTS	math.anal (J)/ sci. comp. (K)	2015- 2016	2016- 2017
		sci. comp. (K)		
3318217 Ahlfors theory	2-10	math.anal (J)		
3318218 Bergman spaces	2-10	math.anal (J)		
3318219 Blaschke products	2-10	math.anal (J)		
3318220 Bloch spaces and normal functions	2-10	math.anal (J)		
3318221 Epälineaarinen potentiaaliteoria (in future)	2-10	math.anal (J)		
3318236 Functional Analysis	8	math.anal (J)		
3318237 Introduction to Harmonic Analysis	4	math.anal (J)	х	
3318222 Funktionaalianalyysin jatkokurssi (in future)	2-10	math.anal (J)		
3318223 Hardy-avaruudet (in future)	2-10	math.anal (J)		
3318224 Hilbertin avaruuksien ydinfunktiot (in future)	2-10	math.anal (J)		
3318225 Holomorphic curves in a projective space	2-10	math.anal (J)		

3318213 Special Course on Complex Analysis	8	math.anal (J)		
3318226 Complex difference equations	2-10	math.anal (J)		
3318227 Complex differential equations	2-10	math.anal (J)		
3318214 Entire Functions	8	math.anal (J)		
3318228 Lakunaariset sarjat (in future)	2-10	math.anal (J)		
3318235 Matemaattisen analyysin kesä- koulu (in future)	2-4	math.anal (J)		
3318412 Research Seminar in Mathematics	2-8	math.anal (J)		
3318229 Meromorfifunktioden normaali- perheet (in future)	2-10	math.anal (J)		
3318215 Nevanlinna Theory	4	math.anal (J)		
3318230 Subharmoniset funktiot (in future)	2-10	math.anal (J)		
3318231 ODY, variaatiomenetelmät ja Sobolev-avaruudet (in future)	2-10	math.anal (J)		
3318232 Operator theory in function spaces	2-10	math.anal (J)		
3318233 p-adinen analyysi (in future)	2-10	math.anal (J)		
3318216 Rieman Mapping Theorem and the Dirichlet Problem	8	math.anal (J)		
3318234 Introduction to Univalent Functions	2-10	math.anal (J)		
3353312 Research Seminar on Computational Physics	2	sci. comp. (K)	Х	х
3356504 Numerical methods	5	sci. comp. (K)		Х
3356512 Partial Differential Equations	5	sci. comp. (K)	х	

3352603 Finite Element Methods	5	sci. comp. (K)	x	
3352604 Inverse Problems	5	sci. comp. (K)		Х
3352601 Optimization	5	sci. comp. (K)		Х
3352609 Statistical Inverse Problems	5	sci. comp. (K)	Х	
3350552 Data Analysis	5	sci. comp. (K)	Х	х
3356507 Probability Theory a	4	sci. comp. (K)		Х
3356508 Probability Theory b	4	sci. comp. (K)		Х
3352610 Estimation Theory	5	sci. comp. (K)	х	
3352542 Signal Analysis	5	sci. comp. (K)	Х	Х
3352541 Digital Image Processing	5	sci. comp. (K)	х	
3352612 Image Analysis	5	sci. comp. (K)		Х
3352615 Physical Acoustics	5	sci. comp. (K)		Х
3351555 Transport Phenomena	5	sci. comp. (K)	Х	Х
3317394 Soft Computing	4	math.model. web-course		
3317392 Modelling and Optimization	4	math.model. web-course		
3317393 Partial Differential Equations in Mathematical Modelling	4	math.model. web-course		
3317396 Stochastic Models	4	math.model. web-course		
3317395 Statistical Models	4	math.model. web-course		

# 2.2.2.2 Doctoral Programme in Environmental Physics, Health and Biology (EPHB)

The Doctoral Programme in Environmental Physics, Health and Biology combines the fields of environmental research from soil to the stratosphere, research into the health impacts of the environment, and biological research to form a multidisciplinary programme.

Research in environmental physics focuses on the study of aerosols in the atmosphere. The Aerosol Physics research group in the Department of Applied Physics specialises in studying how atmospheric particulate matter affects the atmosphere: how, when combined, natural factors and human activity affect the formation of new particulate matter and how particulate matter influences the formation and characteristics of clouds.

The key areas of aerosol studies also include the creation of aerosols in combustion and under laboratory conditions. Important research interests include the small-scale use of wood as solid fuel, including emissions, nanoparticle synthesis in biomedical and industrial applications, bio aerosols and aerosol measuring and analysis techniques. The study of the health impacts of aerosols is a key area of research in atmospheric particulate matter. The toxicity of aerosols is studied using cell lines, animal testing and clinical sampling.

Multidisciplinary research in environmental health covers the potential health risks and impacts of biological, physical and chemical factors in our environment. These studies apply the environmental health risk analysis.

Biological research includes the analysis of biological processes related to changes in the state of the environment within the atmosphere and terrestrial and aquatic ecosystems. Studies are conducted using a range of methods at the level of cell and molecule biology, physiology, ecology and evolutionary biology.

The purpose of the doctoral programme is to provide students with the competences required to create new knowledge, apply methods of scientific research critically and independently, and to work in demanding expert and research positions in academia and the business and public sector.

Students can pursue doctoral degrees via the programme in the following fields of science and research: Applied physics, biology and environmental science Research conducted in internationally acknowledged research groups forms an essential part of the

studies. Students will benefit from wide-ranging networking opportunities during their studies.

### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The degrees available in the doctoral programme are Doctor of Philosophy and Licentiate of Philosophy.

### ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

In addition to the general eligibility criteria for pursuing doctoral studies (described in section 1.4), the previous studies required for the doctoral degree programme are as follows:

Discipline/field of research	Relevant previous qualifications
Aerosol physics/environmental	Physics, chemistry, technical sciences, environ-
physics	mental science or another relevant field
Environmental science	Environmental science, biology, biosciences,
	physics, chemistry or another relevant field
Biology	Biology, environmental science, forest science or
	another relevant field

The leader group of the programme decides on the qualification of previous studies after consultation with the supervisors in the relevant field of research.

The admission criteria for non-Finnish-speaking applicants in terms of language proficiency are described at the beginning of section 2.2.2.

# **HOW TO APPLY**

The most important admission criterion for doctoral studies is a reference from the supervisor. Such a reference can be based on performance in previous studies, the preliminary plan for the research project, the motivation letter and, where required, an interview.

The following documents must be submitted with the application: a copy of the qualification certificate, transcript of studies, CV, plan of the intended research, motivation letter and, where available, personal references. The application must include the written consent of at least two supervisors. At least one of the supervisors must be a professor, or a senior researcher with a docent's qualification, at the University of Eastern Finland.

The doctoral programme is open for admissions throughout the year. Admissions for university-funded graduate school positions are announced separately. In most cases, applications for the supported positions are submitted once a year in the autumn.

### DEGREE STRUCTURE AND STUDY REQUIREMENTS

Overall scope of studies required for pursuing a doctoral degree: 30 ECTS Transferable skills courses 8-10 ECTS. Studies in the discipline and field of research 20-22 ECTS, of which no less than 15 ECTS must be completed at the level of advanced studies. The postgraduate seminar (2 ECTS) is a compulsory course, which can be completed through a series of seminars or the Sato Seminar organised by the UEF Doctoral School.

## Requirements laid down for the doctoral dissertation:

A doctoral dissertation can be a scientific account based on independent research, which is deemed to increase knowledge in the field in question (a monograph). A doctoral dissertation can consist of a sufficient number, determined by the university, of scientific publications discussing the same set of problems (article-based or compiled dissertation). They can be either published or intended/accepted for publication and must be outlined in a separate summary.

Within the faculty, the structure of an article-based or compiled doctoral dissertation is as follows:

- a doctoral dissertation in the form of a collection of research articles typically
  contains 3-5 peer-reviewed scientific articles, of which at least two or at least
  50% must have been published or approved for publication in international,
  scientific peer review series;
- the dissertation must include an account of the author's contribution to joint publications.

The degree must include studies within the discipline and field of research, mainly at the advanced level of studies and supporting the research efforts. The studies may also include courses from other faculties, doctoral degree programmes and universities, including summer schools, seminars, book exams or other work, where these support the research efforts. The aim is to provide joint seminars and methodological studies under

the doctoral degree programme. The lead supervisor assesses the relevancy of completed work from the perspective of the studies as a whole.

# Relevant courses:

Course	ECTS
3351801 Aerosol Science (e-learning)*	5
3351802 Statistical Physics 2	5
3351803 Basics in Meteorology	4
3351555 Transport Phenomena	5
3352701 Aerosol Physics	5
3352702 Atmospheric Chemistry and Physics	5
3352703 Climate Change	5
3352704 Aerosol measurement techniques	5
3352705 Atmospheric radiation and aerosols	5
3352981 Advanced Laboratory Works in Physics	5
3352751 Cloud Microphysics	5-10
3352752 Statistical data analysis for Aerosol Scientists	3
3352985 Practical Training in Physics (M.Sc.)	1-10
3353313 Research seminar on Aerosol Research	2
3352571 Biomaterials	5
3352572 Material Techniques	5
3352573 Characterization of Materials	5
3352574 Nanoparticle Technology	5
3710230 Air Quality and Climate	4
3710221 Aerosol Science*	5

3710225 Emissions from Energy Production and Industry	5
3710444 Chemistry and Physics of Combustion and Emissions	5
3710502 Working Course for Aerosol Techniques	5
3710402 Advanced Occupational Hygiene	3
3710442 Health Effects of Air Pollutants	6
3710435 Exposure Assessment	3
3710436 Exposure Measurements**	4-6
3710437 Modeling in Exposure Assessment	3
3710443 Control of Indoor Air Impurities and Ventilation (in Finnish)	5
3710447 Measurements and Dosimetry of Electromagnetic Fields	3
3710448 Measurements of Optical Radiation	3
3710449 Noise Assessment (in Finnish)	4
3710453 Environmental Health for International Students	5
3710461 Chemicals, Environment and Health	4
3710404 Radiation Biology	5
3710429 Environmental Health Risk Assessment	4
3710434 Environmental Cell Biology	5
3710407 Applied Entomology	5
3710419 Biogeochemistry	6
3710418 Design of Ecological and Environmental Experiments	4
3710406 Ecological Risk Assessment	4
3710405 Ecological Stress Physiology of Plants	6

3710300 Journal Club in Biogeochemistry	2-4
3129406 Journal Club in Plant Biology	2-4
3710468 Methods in Microbial Biogeochemistry	5
3710455 Stable Isotopes in Environmental Research	5
3710466 Urban Ecology	5
4422402 Epidemiology I	2
4219507 Occupational Toxicology	3
4219208 Organ Toxicology	6
4219502 Immunotoxicology	3
4219512 Toxicological and Environmental Risk Assessment and Risk Communication	3
4219214 Toxicology of Compounds	4
4219211 Toxicity Testing	3
4455703 Environmental Epidemiology	3
3351801 Aerosol Science (e-learning)*	
3351802 Statistical Physics 2	2
3351803 Basics in Meteorology	2-4
3351555 Transport Phenomena	5
3352701 Aerosol Physics	5
3352702 Atmospheric Chemistry and Physics	2
3352703 Climate Change	2
3352704 Aerosol measurement techniques	5
3352705 Atmospheric radiation and aerosols	3

3352981 Advanced Laboratory Works in Physics	5
3352751 Cloud Microphysics	3
3352752 Statistical data analysis for Aerosol Scientists	6
3352985 Practical Training in Physics (M.Sc.)	4
3353313 Research seminar on Aerosol Research	5
3352571 Biomaterials	2

<sup>\*</sup>Only one of the courses must be completed; you cannot include both for your degree

# 2.2.2.3 Doctoral Programme in Forests and Bioresources (FORES)

The Doctoral Programme in Forests and Bioresources is a thematic, multidisciplinary programme covering forests and the sustainable use of forests. With a strong international focus, the programme covers all fields of forest sciences and research training for postgraduate students with an interest in the forest-based bioeconomy, renewable resources and biomaterials. With a unique profile at the University of Eastern Finland, ours is the only doctoral programme in Finland focused on forests and the renewable resources and biomaterials provided by them.

### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The degrees available in the doctoral programme are Doctor of Science (Agriculture and Forestry) and Licentiate of Science (Agriculture and Forestry) with Forest Sciences as the major subject and Doctor of Philosophy with Forest Sciences as the major subject.

### ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

Applicants to the Doctoral Programme in Forests and Bioresources must have (1) the relevant background education, (2) a research plan and (3) adequate knowledge in support of their doctoral degree studies. Before submitting an application for the doctoral programme, applicants must be able to name (4) a supervisor/supervisors for their research project. At least one of the supervisors should be a lecturing professor in the School of Forest Sciences or a researcher with a docent's qualification.

Students can apply to the Doctoral Programme in Forests and Bioresources if they have completed a relevant qualification in Finland or abroad and if the doctoral programme

<sup>\*\*</sup>The course is organized both in Finnish and English; you cannot include both for your degree

confirms that they have adequate knowledge and methodological skills for completing a doctorate or a licentiate in forest sciences. The required Master's degree can have been obtained in any field. Sufficient proficiency in English is required.

Students eligible for pursuing the doctoral programme have:

- completed a Master's degree or an equivalent foreign degree in the field of agriculture and forestry, or
- completed another Finnish or foreign degree equal to a Master's degree and are able to demonstrate adequate knowledge and methodological skills for pursuing their studies, or
- completed a relevant polytechnic Master's degree and are able to demonstrate adequate knowledge and methodological skills for pursuing the doctoral programme.
- completed an applicable course abroad which, in the awarding country, confers eligibility for corresponding higher education, where the doctoral programme confirms that the candidate has adequate knowledge and skills for completing his or her studies.

In points (2), (3) and (4), the suitability of the content of previous qualifications as well as the adequacy of the knowledge and methodological skills in question are verified and approved by both the supervising lecturer at the School of Forest Sciences and the director of the leadership group of the doctoral programme.

An applicant may be admitted onto the doctoral programme only if the proposed doctoral dissertation or licentiate thesis is relevant to the theme of the doctoral programme and if the application is recommended by a supervisor who belongs to the teaching staff of the School of Forest Sciences and agrees to act as a supervisor for the research project detailed in the research plan. Arrangements for supervising research projects should be agreed on well in advance and directly with lecturers.

The admission criteria for non-Finnish-speaking applicants in terms of language proficiency are described at the beginning of section 2.2.2.

#### HOW TO APPLY

The application procedure for the right to pursue doctoral studies is described in section 1.5. For further information on applying and the programme, please consult the programme website at www.uef.fi/fi/metsa/doctoral-programme-in-forest-sciences. Foreign students are required to have sufficient proficiency in English. Application deadlines are four times per year. For the 2015-2016 academic year, the deadlines for applications are 30 September 2015, 30 November 2015, 28 February 2016 and 30 April 2016.

The application should be accompanied by a research plan drafted in English and signed by the prospective student and the supervisors. A funding plan should also be included in the research plan. For instructions on how to draw up a research plan, please consult the Doctoral Curricula. After being awarded the right to pursue doctoral studies, students must submit their personal study plan using the form available on the programme's website. Students must submit a signed study plan to the faculty within one month of having been awarded the right to pursue studies.

### DEGREE STRUCTURE AND STUDY REQUIREMENTS

A licentiate or a doctoral degree consists of the following elements:

- A doctoral dissertation or licentiate thesis
- Postgraduate studies (30 ECTS)
  - Transferable skills studies (5 ECTS)
  - Studies in the discipline and field of research (25 ECTS)

In addition to licentiate/doctoral studies, students may, if necessary, be required to complete supplementary studies. Further instructions are provided in the admission criteria for the doctoral programme.

# Requirements laid down for the doctoral dissertation:

A doctoral dissertation can be a scientific account based on independent research, which is deemed to increase knowledge in the field in question (a monograph). A doctoral dissertation can consist of a sufficient number, determined by the university, of scientific publications discussing the same set of problems (article-based or compiled dissertation). They can be either published or intended/accepted for publication, and are outlined in a separate summary.

Within the faculty, the structure of an article-based or compiled doctoral dissertation is as follows:

- a doctoral dissertation in the form of a collection of research articles typically
  contains 3-5 peer-reviewed scientific articles, of which at least two or at least
  50% must have been published or approved for publication in international,
  scientific peer review series;
- the dissertation must include an account of the author's contribution to joint publications.

# Supplementary studies

In addition to doctoral studies (30 ECTS), students may be required to complete supplementary studies. The maximum scope of required supplementary studies is 60 ECTS, depending on the student's earlier qualifications and other knowledge and methodological skills required for pursuing the doctoral programme. The purpose of supplementary studies is to provide students with adequate skills for completing a doctoral dissertation or a licentiate thesis in the field of forest sciences. Supplementary studies are listed separately in an attachment to the doctoral study plan. The supplementary studies plan should be one recommended by the teacher of the School of Forest Sciences who is supervising the doctoral student.

### RPL practices in postgraduate education

The Doctoral Programme in Forests and Bioresources applies the recognition and accreditation of prior learning (RPL) practices. Only (1) advanced-level courses completed in a Finnish or a foreign university or (2) skills and abilities acquired in scientific research projects may be recognised as RPL units and included in the Doctoral Programme studies. RPL units can be approved as either studies in the discipline and field of research or transferable skills studies. RPL units can also be approved as supplementary studies. However, earlier studies already included in the applicant's previous qualifications cannot be approved as RPL units. Any approved RPL units are listed in the doctoral study plan. The teacher of the School of Forest Sciences who supervises the doctoral dissertation or licentiate thesis project also approves any RPL units that can be counted towards the doctoral studies.

## Transferable skills studies (5 ECTS)

We recommend that the general transferable skills studies include (1) ethics of science and (2) management of a research project. In addition, transferable skills studies may

include scientific communication and immaterial rights or other general transferable skills courses provided by the UEF Doctoral School. Descriptions of the courses provided each year (including Research Ethics and Management of a Research Project) can be found in the curriculum of the University of Eastern Finland's Doctoral School.

# Studies in the discipline and field of research (25 ECTS)

Studies in the discipline and field of research are largely elective. Elective studies in the discipline and field of research must support the student's efforts to complete the doctoral dissertation or licentiate thesis. They should also include participation in a research seminar or an international scientific conference in the field (2 ECTS), at which the student gives a presentation, prepared in English on the topic of their doctoral dissertation or licentiate thesis project, or part of it. Under the Doctoral Programme in Forests and Bioresources, an annual research seminar (3514001 Research Seminar, Forest Sciences, 2 ECTS) is arranged in which students are provided with the opportunity to give a presentation on the research project related to their doctoral dissertations or licentiate theses.

Optional forms of study that can be included in the studies within the discipline and field of research include the following:

- Completing the courses in the theory of science and methodology, the associated lectures and exercises.
- Reviewing scientific research and methodology related to the topic of the doctoral dissertation or licentiate thesis and preparing written summaries for the supervisor or sitting examinations on key works.
- Preparing advanced-level courses related to the topic of the doctoral dissertation or licentiate thesis and teaching them.

In addition to courses provided by the University of Eastern Finland, corresponding courses arranged by other Finnish and foreign universities and institutes of higher education can be approved as transferable skills studies or studies in the discipline and field of research. Other courses suitable for doctoral studies are provided, for example, by the Nordic university network NOVA, see www.nova-university.org/

As part of the doctoral programme, the following is arranged: 3514001 Research Seminar, Forest Sciences, 2 ECTS

### 2.2.2.4 Doctoral Programme in Educational Sciences

Postgraduate students in the Faculty of Science and Forestry can complete their degree in the Doctoral Programme in Educational Sciences if their field of research is relevant to the theme of the doctoral degree programme. The doctoral programme is described in section 2.2.1.2.

# 2.2.3 Faculty of Health Sciences

# 2.2.3.1 Doctoral Programme of Clinical Research

The Doctoral Programme of Clinical Research is a multidisciplinary programme that covers all the specialities in clinical medicine. The aim of the programme is to train experts in clinical research and to be a bridge between biomedicine and clinical medicine. Programme serves researchers in all health care units that are part of the special responsibility area (KYS-ERVA) of Kuopio University Hospital and cooperates with The National Graduate School of Clinical Investigation (CLIGS, http://www.vktk.fi/en.php). Doctoral training is mostly provided in the hospital environment of Kuopio University Hospital and as online courses.

#### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The degrees available in the Doctoral Programme of Clinical Research are Doctor of Medicine, Doctor of Dental Science, Licentiate of Philosophy, Doctor of Philosophy, Licentiate of Science (Pharmacy), Doctor of Science (Pharmacy), Licentiate of Science (Health care), Doctor of Science (Health care).

## ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

The eligibility criteria for doctoral degree studies are described in Chapter 1.4. An applicant to the Doctoral Programme of Clinical Research should have a completed or currently ongoing applicable Master's degree and an ongoing or planned research project suitable for a doctoral dissertation project with a research plan approved by an eligible main supervisor as well as supervisors for the doctoral dissertation.

The suitability of the applicant's degree will be assessed by the Doctoral Programme of Clinical Research, and a prospective student may be required to complete supplementary studies to acquire the competencies necessary for participating in the programme.

The skills of eligible applicants to any of the doctoral programmes provided by the Faculty of Health Sciences and their commitment to a successful completion of their doctoral studies are assessed according to the following joint criteria, which constitute the admission criteria of the programme:

- quality of the research plan: innovativeness of the research topic, feasibility, clarity and implementation methods of the research plan as well as its suitability to the research profile and strategy of the department, school or unit where the research project is to be carried out;
- scientific and practical relevance of the research topic;
- evidence of any previous research projects carried out by the applicant, such as working as a researcher;
- funding plan;
- performance in Master's studies or corresponding studies
- international orientation and language skills required in the studies

In the selection process, the adequacy of supervision and the special expertise required from the supervisor are also taken into consideration. Applicants' preparedness, motivation and commitment to doctoral studies can also be estimated with interviews.

### **HOW TO APPLY**

The application procedure for the right to pursue doctoral studies is described in Chapter 1.5. There are four annual deadlines for applications to the Doctoral Programme of Clinical Research: 30 September, 30 November, 28 February and 30 April.

If the applicant has not yet completed his/her previous degree, the applicant to the Doctoral Programme of Clinical Research shall submit a transcript of records instead of a degree certificate and a plan for completing the remaining studies in the previous degree (a personal study plan). In addition, a favourable opinion of the Research Ethics Committee and administrative approval from the organization should be submitted.

In addition to the documents mentioned above, an applicant to the Doctoral Programme of Clinical Research may, on a case-by-case basis, also be asked to provide other documentation considered as necessary for the selection. Details for each call must be checked on the Internet -pages of the Doctoral Programme of Clinical Research: <a href="http://www.uef.fi/en/dpcr/etusivu">http://www.uef.fi/en/dpcr/etusivu</a>

#### DEGREE STRUCTURE AND STUDY REQUIREMENTS

Doctor of Medicine and Doctor of Dental Science: Studies of 30 ECTS (of which transferable skills courses account for between 5 and 15 ECTS and studies in the discipline and field of research for between 15 and 25 ECTS) and an approved doctoral dissertation.

Licentiate of Philosophy, Doctor of Philosophy, Licentiate of Science (Pharmacy), Doctor of Science (Pharmacy), Licentiate of Science (Health Care) and Doctor of Science (Health Care): Studies of 40 ECTS (of which transferable skills courses account for between 5 and 15 ECTS and studies in the discipline and field of research for between 25 and 35 ECTS) and an approved licentiate thesis or doctoral dissertation.

The balance of transferable skills courses and discipline and field of research doctoral studies shall be determined jointly by the student and the supervisors at the time when the personal doctoral study plan is being prepared and depends on the student's educational background and research plan. The personal post graduate study plan has to be submitted to the Faculty of health Sciences within 3 months of the admission date.

### Transferable skills studies

The purpose of the general transferable skills studies provided by the University of Eastern Finland's Doctoral School is that the doctoral student

- becomes familiar with the general theory and philosophy of science
- adopts good research ethics and learns to know the associated legislation and good academic practice
- acquires the ability to plan a scientific research project, including problematisation, methods, resources, scheduling, etc.
- acquires good communication skills in the course of studies and is capable of critical scientific communication, both oral and written, and of explaining his or her field to non-specialist audiences
- learns management and teamwork skills
- has the basic qualification to give scientific education and work as a specialist in the field
- acquires the preparedness to work in an international environment.

General transferable skills studies may also include, where applicable, studies provided by the Doctoral Programme of Clinical Research and the Research Unit of Kuopio University Hospital (see Content of the studies).

# Studies in the discipline and field of research

Studies in the student's specific field of research and supporting fields should provide the student with as much knowledge on the research topic as possible. The scope of the studies and the emphasis of different elements depend on the theme of the research project and the desired targets of the studies. However, study modules in subject-related doctoral studies must be sufficiently extensive.

Studies not provided by the University of Eastern Finland, the Doctoral Programme of Clinical Research or the Kuopio University Hospital and studies that are not conferences, separate publications or book exams must be proven by submitting proof of the attainment and the main supervisor's statement of the relevancy of the attainment from the perspective of the personal doctoral study plan and of the number of ECTS credits awarded for the attainment. If the student has completed courses abroad, their credits must be converted to correspond with the credit system used in Finland.

## Content of the studies

It is recommended that all doctoral students in the Doctoral Programme of Clinical Research attend the courses Introduction to Clinical Research (1 ECTS) and Seminar of the Graduate School of Clinical Research (2 ECTS) provided by the Doctoral Programme of Clinical Research as well as Introductory Course for a Clinical Researcher (5 ECTS; online course) provided by the Science Service Center of Kuopio University Hospital. In addition, it is recommended that all doctoral students attend at least one scientific conference and have a presentation there.

Courses for compiling the study plan can be found in curricula in WebOodi (Courses => Course catalogues => Doctoral Programme in Clinical research, Degree structures page).

Studies of the doctoral students in the Doctoral Programme of Clinical Research may consist of the following modules:

- 1. General transferable skills studies provided by the University of Eastern Finland's Doctoral School (http://www.uef.fi/en/web/guest/research/doctoralschool/transferable-skills-studies)
- 2. Studies in the discipline and field of research
- A) completed Specialist Degree in Medicine or Specialist Degree in Dentistry (8 ECTS)
- B) Modules provided by the Doctoral Programme of Clinical Research, Kuopio University Hospital and University of Eastern Finland (course descriptions are available in

WebOodi at https://weboodi.uef.fi/weboodi/)

- C) Other study modules to be agreed separately by supervisors, such as seminar series (up to 8 ECTS) and similar courses, courses provided by other doctoral programmes, studies completed in other universities and international courses (as applicable).
- D) Public examination of the research plan (3 ECTS) The purpose of a public examination of the research plan is to provide the doctoral student with skills for assessing critically a research topic, planning a research project required for a doctoral dissertation and replying questions asked by a panel (course description available in WebOodi).
- E) Scientific conferences (up to 8 ECTS; duration 2 3 days, 1 cp; 4 5 days, 1,5 cp; own presentation, 1 cp)
- F) Separate publications not included in the doctoral dissertation or another study module (up to 1/10 of the total scope of the degree)G) Book exams (up to 1/5 of the total scope of the degree) (Text books: 100 pages = 1.5 ECTS)

A doctoral dissertation is also required for a doctoral degree. Requirements for a doctoral dissertation are detailed in Chapter 2.3.3.

Further information on the programme and contact persons can be found on the program's Internet- pages at: <a href="http://www.uef.fi/en/dpcr/etusivu">http://www.uef.fi/en/dpcr/etusivu</a>

# 2.2.3.2 Doctoral Programme in Drug Research

The Doctoral Programme in Drug Research is a multidisciplinary programme that covers all the specific areas in pharmaceutical research and toxicology. The doctoral programme is operated by the School of Pharmacy of the University of Eastern Finland in close cooperation with the national FinPharma Doctoral Program (FPDP); http://fpdp.fi.

Doctoral training is provided through FPDP's annual meeting and Finnish and international courses organised by the School of Pharmacy, doctoral programmes in related sciences and different FPDP sections (Pharmacy, Clinical Drug Research, Drug Discovery and Toxicology). The courses are repeated in cycles of 1 to 4 years.

The aim is to train experts with a doctoral degree and wide range of skills to work in duties related to drug research and development, pharmacovigilance and toxicology in Finland and abroad for the needs of both private and the public sector. It takes about four years for a full-time doctoral student to acquire the necessary scientific and methodological skills for preparing a doctoral dissertation and completing a doctorate.

### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The degrees available in the Doctoral Programme in Drug Research are Licentiate of Science (Pharmacy), Doctor of Science (Pharmacy), Licentiate of Philosophy, Doctor of Philosophy, Doctor of Dental Science and Doctor of Medicine.

### ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

The eligibility criteria for doctoral degree studies are described in Chapter 1.4. Eligible applicants to the Doctoral Programme in Drug Research have completed a Master's degree in pharmacy, natural sciences or other relevant field or an equivalent studies in medicine or dental science (300 ECTS).

The skills of eligible applicants to any of the doctoral programmes provided by the Faculty of Health Sciences and their commitment to a successful completion of their doctoral studies are assessed according to the following joint criteria, which constitute the admission criteria of the programme:

- quality of the research plan: innovativeness of the research topic, feasibility, clarity and implementation methods of the research plan as well as its suitability to the research profile and strategy of the department, school or unit where the research project is to be carried out;
- funding plan;
- scientific and practical relevance of the research topic;
- evidence of any previous research projects carried out by the applicant, such as working as a researcher
- performance in Master's studies or corresponding studies
- international orientation and language skills required in the studies

In the selection process, the adequacy of supervision and the special expertise required from the supervisor are also taken into consideration. Applicants' preparedness, motivation and commitment to doctoral studies can also be estimated with interviews.

### **HOW TO APPLY**

The application procedure for the right to pursue doctoral studies is described in Chapter 1.5. There are four annual deadlines for applications to the Doctoral Programme in Drug Research: 30 September, 30 November, 28 February and 30 April.

The application form and required appendices are submitted to the Register's office of the Faculty of Health Sciences (University of Eastern Finland, Faculty of Health Sci-

ences, Administration Service Center, Register's Office (Kirjaamo), Secretary of Personnel Affairs Jari Koponen, P.O.Box 1627, 70211 Kuopio). Visiting address: Yliopistonranta 1 C, Canthia, A/H-entrance, room1016.

In addition to the appendices mentioned in the application form applicants are asked to submit CV and motivation letter. Depending on the call, applicants can be asked to submit additional documents, and details for each call must be checked on the Internet – pages of the Doctoral Programme in Drug Research: http://www.uef.fi/en/dpdrugresearch. If necessary, applicants may be interviewed for the doctoral programme.

#### DEGREE STRUCTURE AND STUDY REQUIREMENTS

The studies are divided into transferable skills courses and discipline and field of research doctoral studies. The balance of transferable skills courses and discipline and field of research doctoral studies may vary and shall be determined jointly by the student and the supervisors depending on the student's educational background, research plan and career plan at the time when the personal doctoral study plan is being prepared. The personal post graduate study plan has to be submitted to the Faculty of health Sciences within 3 months of the admission date.

Doctor of Science (Pharmacy), Licentiate of Science (Pharmacy), Doctor of Philosophy and Licentiate of Philosophy: Studies of 40 ECTS (of which transferable skills studies account for between 5 and 15 ECTS and studies in the discipline and field of research for between 25 and 35 ECTS) and an approved licentiate thesis or doctoral dissertation.

Doctor of Medicine and Doctor of Dental science: Studies of 30 ECTS (of which transferable skills studies account for between 5 and 15 ECTS and studies in the discipline and field of research for between 15 and 25 ECTS) and an approved doctoral dissertation.

The purpose of the general transferable skills studies is that the doctoral student:

- becomes familiar with the general theory and philosophy of science
- adopts good research ethics and learns to know the associated legislation and good academic practice
- acquires the ability to plan a scientific research project, including problem setting, methods, resources, scheduling, etc.
- acquires good communication skills in the course of studies and is capable of critical scientific communication, both oral and written, and of explaining his or her field to non-specialist audiences

- learns management and teamwork skills
- has the basic qualification to give scientific education and work as a specialist in the field
- acquires the preparedness to work in an international environment.

Studies in the discipline and field of research should provide the student with as much knowledge on the research topic as possible, but their scope and mutual balance depend on the research topic and the purposes of the doctoral education. However, study modules in subject-related doctoral studies must be sufficiently extensive. The doctoral student's main field of studies is the field where the student is qualified to pursue doctoral studies.

Studies in the student's main field of research must be advanced-level studies. Studies in the supporting fields can contain intermediate and advanced courses or literature examinations. A doctoral programme may not, however, contain complete intermediate or advanced study modules in their entirety.

Courses for compiling the study plan can be found in curricula in WebOodi (Courses => Course catalogues => Doctoral Programme in Drug research, Degree structures page).

Studies not provided by the University of Eastern Finland or FPDP and studies that are not conferences, separate publications or book exams must be proven by submitting proof of the attainment and the main supervisor's statement of the relevancy of the attainment from the perspective of the personal doctoral study plan and of the number of ECTS credits awarded for the attainment. If the student has completed courses abroad, their credits must be converted to correspond with the credit system used in Finland.

The degrees of all doctoral students in the Doctoral Programme in Drug Research must include a preliminary examination (between 5 and 8 ECTS) and a defense of the research plan (3 ECTS).

Studies may consist of the following modules:

- 1. General transferable skills studies provided by the University of Eastern Finland's Doctoral School (http://www.uef.fi/en/web/guest/research/doctoralschool/transferable-skills-studies)
- 2. Studies in the discipline and field of research may consist of the following modules:
- (a) Courses provided by the School of Pharmacy and the University of Eastern Finland

(course descriptions are available in WebOodi: https://weboodi.uef.fi/weboodi/)

- (b) Courses provided by the different sections of FPDP (course descriptions are available at http://fpdp.fi)
- (c) Other courses separately approved by the supervisors, such as seminar series (up to 8 ECTS for seminars)
- (d) Preliminary examination, between 5 and 8 ECTS, (4212111) OBLIGATORY The examination helps to ensure that a doctoral student has sufficient background knowledge on the field of study.
- (e) Defense of the research plan, 3 ECTS, (4212112) OBLIGATORY

The purpose of a defense of the research plan is to provide the doctoral student with skills for assessing critically a research topic, planning a research project required for a doctoral dissertation and replying questions asked by a panel. The defense of the research plan must be completed by the end of the third year of studies (course description available in WebOodi).

- (f) Scientific conferences, up to 8 ECTS (at least one conference with a presentation by the student is recommended). Recommendations: duration 2 3 days, 1 cp; 4 5 days, 1,5 cp; own presentation, 1 cp)
- (g) Separate publications not included in the doctoral dissertation or another study module, up to 1/10 of the total scope of the degree
- (h) Book examinations, up to 1/5 of the total scope of the degree (Text books: 100 pages =1,5 ECTS)
- (i) A completed Specialist Degree in Medicine or Dentistry, 8 ECTS
- (j) Research seminar
- (k) Doctoral dissertation

Requirements for a doctoral dissertation are detailed in Chapter 2.3.

Further information on the programme and contact persons can be found on the program's Internet- pages at: <a href="http://www.uef.fi/en/dpdrugresearch">http://www.uef.fi/en/dpdrugresearch</a>

# 2.2.3.3 Doctoral Programme in Molecular Medicine

The Doctoral Programme in Molecular Medicine is an interdisciplinary doctoral training programme with the purpose of training researchers as international experts in modern biomedicine. Molecular medicine studies the causes and mechanisms of origin of diseases on a molecular level and strives to find methods to treat and prevent these diseases. Research fields in the programme range from basic laboratory sciences and diagnostics to applied clinical research. The doctoral programme concentrates on the re-

search of major diseases, such as cardiovascular diseases, type 2 diabetes, obesity, neurological diseases, inflammations and cancer, as well the possibilities provided by stem cell technologies in the treatment of various diseases.

The programme is divided into the following six research programmes: (1) cardiovascular diseases, (2) type 2 diabetes and obesity, (3) neurological diseases, (4) cancer, (5) inflammations and (6) stem cell research. The doctoral programme provides high-quality doctoral education by arranging scientific training courses, seminar series and supervision of doctoral studies. The language of instruction in the doctoral courses is English. Doctoral students prepare their doctoral dissertations in the one of the research groups of the programme. Every doctoral student has at least two supervisors who help the student in preparing a research plan and a doctoral study plan and guide the research project on a regular basis until its completion. The personal post graduate study plan has to be submitted to the Faculty of health Sciences within 3 months of the admission date. The objective of the doctoral programme is to enable doctoral students complete their doctoral degrees in four years.

#### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The following degrees are available in the Doctoral Programme in Molecular Medicine: Licentiate of Science (Pharmacy), Doctor of Science (Pharmacy), Licentiate of Philosophy, Doctor of Philosophy, Doctor of Dental Science, Doctor of Medicine, Licentiate of Science (Health Care) and Doctor of Science (Health Care).

### ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

The eligibility criteria for doctoral degree studies are described in Chapter 1.4. Eligible applicants to the Doctoral Programme in Molecular Medicine have a Master's degree in sciences, medicine, dental sciences, pharmacy, health care or other relevant field. Persons who university otherwise finds to possess adequate knowledge and skills for PhD studies, can also be given the post graduate study right.

Applicants should have the necessary background knowledge (scientific basic knowledge obtained during the completion of the basic qualification) and skills (scientific methods and their application learned during the completion of the basic qualification) for carrying out research projects, and they should be competent and motivated to pursue a doctoral degree.

The skills of eligible applicants to any of the doctoral programmes provided by the Faculty of Health Sciences and their commitment to a successful completion of their doctoral studies are assessed according to the following joint criteria, which constitute the admission criteria of the programme:

- quality of the research plan: innovativeness of the research topic, feasibility, clarity and implementation methods of the research plan as well as its suitability to the research profile and strategy of the department, school or unit where the research project is to be carried out;
- scientific and practical relevance of the research topic;
- evidence of any previous research projects carried out by the applicant, such as working as a researcher
- performance in Master's studies or corresponding studies
- international orientation and language skills required in the studies

In the selection process, the adequacy of supervision and the special expertise required from the supervisor are also taken into consideration. Applicants' preparedness, motivation and commitment to doctoral studies can also be estimated with interviews.

#### **HOW TO APPLY**

The application procedure for the right to pursue doctoral studies is described in Chapter 1.5. There are four annual deadlines for applications to the Doctoral Programme in Molecular Medicine: 30 September, 30 November, 28 February and 30 April.

The application form and required appendices are submitted to the Register's office of the Faculty of Health Sciences (University of Eastern Finland, Faculty of Health Sciences, Administration Service Center, Register's Office (Kirjaamo), Secretary of Personnel Affairs Jari Koponen, P.O.Box 1627, 70211 Kuopio). Visiting address: Yliopistonranta 1 C, Canthia, A/H-entrance, room1016.

In addition to the appendices mentioned in the application form applicants are asked to submit a motivation letter and supervisors' statement on the student's ability to perform post graduate studies. Details for each call must be checked on the Internet -pages of the Doctoral Programme in Molecular Medicine: http://www.uef.fi/en/dpmm.

This additional information provided during the student selection process makes it possible to consider the applicants' previous research experience and knowledge of the research field, which may contribute to the completion of a doctoral degree in this field within the required time limit.

If necessary, applicants may be invited to be interviewed or video interviewed for the doctoral programme.

### DEGREE STRUCTURE AND STUDY REQUIREMENTS

Doctor of Philosophy, Licentiate of Philosophy, Doctor of Science (Pharmacy), Licentiate of Science (Pharmacy), Doctor of Science (Health Care), and Licentiate of Science (Health Care), Doctor of Medicine and Doctor of Dental Science: Studies of 30 ECTS (of which transferable skills studies account for between 5 and 15 ECTS and studies in the discipline and field of research for between 15 and 25 ECTS) and an approved licentiate thesis or doctoral dissertation.

Doctoral students must complete at least 7,5 ECTS of doctoral studies every year. Orientation to postgraduate studies (1145005) is mandatory for all students in the Doctoral Programme in Molecular Medicine. All other courses are optional. The doctoral study plan should be prepared to support the student's research project and doctoral degree.

Courses for compiling the study plan can be found in curricula in WebOodi (Courses => Course catalogues => Doctoral Programme in Molecular medicine, Degree structures page).

For courses arranged outside the University of Eastern Finland, a certificate of studies as well as a statement by main supervisor concerning the suitability of the course for the personal postgraduate study plan as well as with regard to the number of credits to be granted must be presented. For courses completed abroad, the number of credits must be equalized to the Finnish credit system.

Other studies that may be included in the doctoral degree

- seminars (up to 8 ECTS).
- scientific conferences in Finland and abroad (up to 8 ECTS). Recommendations: duration 2 3 days, 1 cp; 4 5 days, 1,5 cp; own presentation, 1 cp)
- work in research institutes or similar outside university (up to 8 ECTS)

- scientific articles related to the field of research but not included in the doctoral dissertation or another study module (up to 1/10 of the total scope of the degree). The number of credits given for each scientific article is based on a statement given by the student's main supervisor.
- book exams (up to 1/5 of the total scope of the degree) (Text books: 100 pages
   =1,5 ECTS)
- studies not included in any other degrees (where applicable)
- A completed Specialist Degree in Medicine or Dentistry, 8 ECTS

When preparing the doctoral study plan, the doctoral student and the supervisor should carefully consider the balance of other studies in the degree and ensure that the content of the degree meets the requirements for a doctoral degree and supports the completion of the degree.

Further information on the programme and contact persons can be found on the program's Internet- pages at: http://www.uef.fi/en/dpmm

# 2.2.3.4 Doctoral Programme in Health Sciences

The Doctoral Programme in Health Sciences is a multidisciplinary programme providing in-depth education in the following fields: nursing science, public health (including ergonomics, sports medicine), primary health care (geriatrics, occupational health care, general practice) and nutrition science (including food sciences). The purpose of the doctoral programme is to train excellent, internationally oriented researchers and experts for a variety of national and international roles. The doctoral programme is arranged in collaboration with national doctoral degree programme networks.

- The Finnish Doctoral Education Network in Nursing Science <a href="https://www.utu.fi/en/units/med/units/hoitotiede/doctoral\_programme/Pages/home.aspx">https://www.utu.fi/en/units/med/units/hoitotiede/doctoral\_programme/Pages/home.aspx</a>
- Doctoral Programmes in Public Health: www.uta.fi/hes/dpph/index.html

### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The following degrees are available through the Doctoral Programme in Health Sciences: Licentiate of Philosophy, Doctor of Philosophy, Licentiate of Science (Pharmacy), Doctor of Science (Pharmacy), Licentiate of Science (Health Care) and Doctor of Science (Health Care), Doctor of Medicine and Doctor of Dental Science.

#### **ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA**

The eligibility criteria for doctoral degree studies are described in section 1.4. Students eligible for pursuing studies in the Doctoral Programme in Health Sciences have completed a Master's or Licentiate degree with a relevant educational background (the requirement for supplementary studies will be agreed upon separately, on a case by case basis).

Doctoral students in health sciences must have completed advanced studies at a university before they can apply for a place on the doctoral programme. The scope and quality of the treatment of the subject and any advanced studies in research methods (qualitative and quantitative methods, statistics) or otherwise proven methodological skills will be considered during admission.

The skills of applicants eligible for any of the doctoral programmes provided by the Faculty of Health Sciences and their commitment to the successful completion of their doctoral studies are assessed in accordance the following joint criteria, which constitute the admission criteria for the programme:

- quality of the research plan: the innovativeness of the research topic, feasibility, clarity and implementation methods of the research plan, as well as its suitability for the research profile and strategy of the department, school or unit in which the research project is to be carried out;
- scientific and practical relevance of the research topic;
- evidence of any previous research projects carried out by the applicant involving, say, work as a researcher, or a research funding plan;
- a successful performance in Master's or corresponding studies;
- international orientation and language skills required in the studies.

Adequacy and expertise of supervision are also considered upon admission. Interviews may be conducted in order to assess the applicants' preparedness, motivation and commitment to doctoral studies.

### **HOW TO APPLY**

The application procedure for the right to pursue doctoral studies is described in section 1.5. The application deadlines for the Doctoral Programme in Health Sciences are four times per year: 30 September, 30 November, 28 February and 30 April.

Applications must be submitted by the deadline to the Registry Office of the Faculty of Health Sciences (University of Eastern Finland, Regitry Office of the Faculty of Health Sciences, Personnel Secretary Jari Koponen, P.O. Box 1627, 70211 Kuopio, Finland). Street address: Yliopistonranta 1 C, Canthia, Entrance A/H, Room 1016.

In addition to the attachments referred to in the form, the applicants must submit the following documents:

- CV
- Motivation letter
- List of publications
- Signed supervision document (www.uef.fi/fi/ttdk/ohjeet-ja-lomakkeet2)

For application-specific instructions, please consult the website of the Doctoral Programme in Health Sciences: www.uef.fi/en/web/dphealthsci. If necessary, applicants may be interviewed for the doctoral programme.

### DEGREE STRUCTURE AND STUDY REQUIREMENTS

Licentiate of Philosophy and Doctor of Philosophy, Licentiate of Science (Pharmacy) and Doctor of Science (Pharmacy), and Licentiate of Science (Health Care) and Doctor of Science (Health Care): Studies equivalent to 40 ECTS (of which transferable skills studies account for between 5 and 10 ECTS and studies in the discipline and field of research for between 25 and 35 ECTS) and an approved licentiate thesis or doctoral dissertation;

Doctor of Medicine and Doctor of Dental Science: Studies equivalent to 30 ECTS (of which transferable skills courses account for between 5 and 15 ECTS and studies in the discipline and field of research for between 15 and 25 ECTS) and an approved doctoral dissertation.

The balance between transferable skills courses and studies in the discipline and field of research is jointly determined by the student and the supervisors at the time of the personal doctoral study plan's preparation and depends on the student's educational background and research plan. The personal postgraduate study plan is submitted to the Faculty of Health Sciences within 3 months of the right to study being granted.

General transferable skills studies include courses provided by the University of Eastern Finland's Doctoral School. The purpose of these studies is to ensure that the doctoral student:

- becomes familiar with the general theory and philosophy of science
- adopts sound research ethics and becomes knowledgeable of the associated legislation and good academic practice
- acquires the ability to plan a scientific research project, including problematisation, methods, resources, scheduling, etc.
- acquires good communication skills during the course of his or her studies and is capable of critical scientific communication, both oral and written, and of explaining his or her field to non-specialist audiences
- learns management and teamwork skills
- acquires the basic abilities required to provide scientific training to others and work as a specialist in the field
- acquires the preparedness to work in an international environment.

Courses that can be included in the study plan are found in the Doctoral Curricula in WebOodi (Courses => Course catalogues => Doctoral Programme in Health Sciences, Degree structures page).

The following courses in general transferable skills are compulsory for postgraduate students pursuing the Doctoral Programme in Health Sciences:

- English for Postgraduate Students (4 ECTS), 8010060
- Postgraduate studies orientation (0 ECTS), 1145005

Studies in the discipline and field of research should provide the student with the essential knowledge required to pursue research. The scope of the studies and the emphasis of different elements depend on the theme of the research project and the goals of the studies. However, courses within the discipline and field of research must be sufficiently extensive.

<u>Studies in the discipline and field of research</u> on the Doctoral Programme in Health Sciences may consist of doctoral courses provided by the University of Eastern Finland or other universities and research schools. See the Doctoral Curricula in WebOodi.

The following courses in the discipline and field of research are compulsory for post-graduate students pursuing the Doctoral Programme in Health Sciences:

• Writing grant applications for PhD students (2 ECTS), 4018104

For courses arranged outside the University of Eastern Finland, a certificate of studies as well as a statement by main supervisor concerning the suitability of the course for the personal postgraduate study plan as well as with regard to the number of credits to be granted must be presented. For courses completed abroad, the number of credits must be equalized to the Finnish credit system.

Other courses that may be included in the doctoral degree

- seminars (up to 8 ECTS)
- scientific conferences in Finland and abroad (up to 8 ECTS) Recommendations: for a two- or three-day conference: 1 ECTS; for a three- to five-day conference: 1.5 ECTS; presenting a paper: additional 1 ECTS.
- work in research institutes or similar places outside the university (up to 8 ECTS)
- academic articles related to the field of research but not included in the doctoral dissertation or other courses (up to 1/10 of the total scope of the degree).
   The number of credits awarded for each academic article is based on a statement by the student's lead supervisor.
- book exams up to 1/5 of the total scope of the degree (Books: 100 pages = 1.5 ECTS)
- studies not included in any other degrees (where applicable)
- a completed Specialist Degree in Medicine or Specialist Degree in Dentistry (8 ECTS)

For further information on the doctoral degree programme and the contact persons, please consult the programme's website at www.uef.fi/en/web/dphealthsci.

# 2.2.4 Faculty of Social Sciences and Business Studies

The following common directions are observed in the doctoral studies provided by the Faculty of Social Sciences and Business Studies.

#### DOCTORAL PROGRAMMES AND THE DEGREES AVAILABLE

The scientific doctoral degrees available in the faculty are the degree of licentiate and doctoral degree, which may be completed as follows:

Doctoral programmes provided by the faculty:

- Past, Space and Environment in Society Doctoral Programme: Licentiate in Philosophy and Doctor of Philosophy (in both Humanities and Natural Sciences); Licentiate in Social Sciences and Doctor of Social Sciences
- Doctoral Programme in Business: Licentiate in Science (Economics and Business Administration) and Doctor of Science (Economics and Business Administration)
- Doctoral Programme in Law: Licentiate in Administrative Sciences and Doctor of Administrative Sciences; Licentiate in Laws and Doctor of Laws. Only those students who have been awarded the study right for the degree of Licentiate or Doctor of Administrative Sciences prior 1 August 2013 may complete these degrees.
- Doctoral Programme in Social and Cultural Encounters: Licentiate in Philosophy and Doctor of Philosophy; Licentiate in Administrative Sciences and Doctor of Administrative Sciences; Licentiate in Science (Economics and Business Administration) and Doctor of Science (Economics and Business Administration); Licentiate in Laws and Doctor of Laws; Licentiate in Social Sciences and Doctor of Social Sciences. Only those students who have been awarded the study right for the degree of Licentiate or Doctor of Administrative Sciences prior 1 August 2013 may complete these degrees.
- Welfare, Health and Management Doctoral Programme: Licentiate in Social Sciences and Doctor of Social Sciences; Licentiate in Health Sciences and Doctor of Health Sciences

In business, law, health sciences and social sciences, it is also possible to complete the degree of Doctor of Philosophy as specified in the curriculum of the respective doctoral programme. The degree is chosen by the student when applying for or during doctoral studies.

#### APPLICATION PROCESS

An application for a study right shall be delivered by the deadlines defined in the curriculum. The applicant must attach a research plan as well as copies of the degree and study certificates into the application.

#### STUDIES REQUIRED FOR THE DEGREES

Licentiate and doctoral studies comprise at least 40 or 50 ECTS of studies in research and professional skills as well as a licentiate thesis or a doctoral dissertation. Studies may include doctoral education and research seminars, courses and other study mod-

ules provided by the doctoral programme as well as training provided by the UEF Doctoral School as specified in the curricula. Studies provided by graduate schools and national doctoral training networks may be counted towards the degree if participation in these studies is not restricted.

Studies completed in other universities may also be counted towards a licentiate or a doctoral degree, if they are suitable for the themes of the doctoral programme and are part of an approved study plan (decision of the Dean of 3 February 2010). Courses may also be substituted with others, if the objectives and contents of the completed course correspond to the course in the doctoral programme.

No completed studies can be counted towards a licentiate thesis or a doctoral dissertation.

If a doctoral student has previously completed a licentiate degree in his/her current subject or a neighbouring discipline or a doctorate in a neighbouring discipline, studies in research and professional skills are, in most cases, not required. If necessary, the student may be expected to complete supplementary studies as specified in the curriculum of the doctoral programme.

## ELIGIBILITY OF EXPERTS AND PUBLIC EXAMINATION OF THE DISSERTATION

#### Supervisors

The Dean will appoint at least two supervisors for every doctoral student. One of the supervisors shall hold a professor's or a docent's title with the University of Eastern Finland or have a corresponding qualification (Degree Regulations of the University of Eastern Finland, Section 4) and be a member of staff in the Faculty of Social Sciences and Business Studies and a member of the supervisory staff of the doctoral programme.

The supervisor can be replaced for a justified reason. Examples of justified reasons are that the theme of the research project has been changed or readjusted or that the research project is not making satisfactory progress. The proposal for replacing a supervisor may be made by the student or by the supervisor, and the final decision is made by the Dean. Any disputes concerning the supervision are primarily settled by the Director of the Department and secondarily by the Dean.

## Examiners of a licentiate thesis

Examiners of a licentiate thesis must be persons who have completed a doctorate degree and are not mainly members of the staff of the University of Eastern Finland.

## Pre-examiners of a doctoral dissertation

The faculty council appoints for a doctoral dissertation two pre-examiners who, in principle, should hold a docent's qualification or have corresponding scientific merits and not be members of the staff of the University of Eastern Finland. If a preliminary examiner does not have the qualification of a docent, the Dean verifies the examiner's eligibility for the task on the basis of a curriculum vitae and a list of publications.

## Opponent and Custos

The opponent must be a docent or hold a similar scientific qualification and not be a member of the staff of the University of Eastern Finland (Degree Regulations of the University of Eastern Finland, Section 25). The Custos should, in principle, be a professor or a docent with the University of Eastern Finland.

## Public examination of the dissertation

The public examination of the dissertation should, in principle, be held at one of the university campuses.

#### TRANSITIONAL PROVISIONS

## Transition to the doctoral programmes

Students whose right to pursue a licentiate or doctoral degree has been awarded before 31 December 2012 must register for one of the doctoral programmes by informing Student and Learning Services of their student number and the name of the doctoral programme.

Students on the doctoral programmes merging on 1 August 2015 will be transferred to the new doctoral programmes as follows:

Students on the Doctoral Programme in Social and Health Management, the Doctoral Programme in Social Work and Social Services and the Doctoral Programme in Wellbeing and Health Research will be transferred to the Doctoral Programme in Welfare, Health and Management.

Students on the Doctoral Programme in Natural Resources, Environment and Society and the Doctoral Programme in Russian and Border Studies will be transferred to the Doctoral Programme in Social and Cultural Encounters.

Students wishing to transfer to another programme must notify the Student and Learning Services by 13 December 2015 following the instructions given above.

## Instructions on theses and dissertations

Students who have begun their studies before 1 January 2013 are entitled to follow the instructions on theses and dissertations adopted on 1 January 2013.

## 2.2.4.1 Past, Space and Environment in Society Doctoral Programme

The research mission of the Department of Geographical and Historical Studies is defined as follows: "We conduct research into the use of natural resources, local relations to the environment, welfare and the encounters of cultures in border areas, fringe regions and peripheries, and their social, geographical and historical development dynamics. Accordingly, the Past, Space and Environment in Society Doctoral Programme explores the past, space as a concept of geography and the environment as a social phenomenon. The disciplines represented in the programme are history, geography and environmental policy and doctoral students are completing their studies at the Department of history and geography. Students majoring in other subjects in other departments and faculties of the University of Eastern Finland may also pursue the doctoral degree programme, provided that their research orientation focuses on historical sciences, geography or environmental policy. The purpose of the programme is to encourage researchers to cross the boundaries between disciplines on the level of theory formulation, methodology and the themes to be studied. It aims to promote research of the themes defined in the mission of the Department of Geographical and Historical Studies (see above), which is also taken into account in study arrangements. The programme is bilingual; courses are either in English or in Finnish.

#### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

A student admitted to the doctoral programme may complete the following degrees: Licentiate in Philosophy, Licentiate in Social Sciences, Doctor of Philosophy and Doctor of Social Sciences. It is possible to complete the degree of Doctor of Philosophy (Ph.D.) in every major. The student can apply for the right to change the target degree using a form available on the Faculty website. The licentiate degree is voluntary and not an obligatory part of the doctoral degree studies. For a licentiate or a doctoral degree, the student must complete studies of at least 50 ECTS which support the research project or professional competence and write a licentiate thesis or a doctoral dissertation. A licentiate thesis can include a public examination or it can be evaluated in the faculty on the basis of statements given by the examiners. A doctoral dissertation must always be defended in public.

The major subjects and the available degrees in the doctoral programme are:

Finnish History Licentiate in Philosophy/Doctor of Philosophy
General History Licentiate in Philosophy/Doctor of Philosophy
Geography Licentiate in Philosophy/Doctor of Philosophy

Human Geography Licentiate in Social Sciences/

Doctor of Social Sciences/Doctor of Philosophy

Environmental policy Licentiate in Social Sciences/Doctor of

Social Sciences/Doctor of Philosophy

Social Pedagogy Licentiate in Social Sciences/Doctor of

Social Sciences/Doctor of Philosophy

In case a PhD student wants to change his/her major in the Doctoral Programme, he/she should write a free-form application. The application should include personal details, contact information, current and applied major, and current and applied target degree. Grounds for the change of the major must be provided in the application. The application should be sent to o the Head of Academic and Student Affairs of the Faculty of Social Sciences and Business Studies. The individual study plan should be updated when major is changed.

#### **FLIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA**

The eligibility criteria for doctoral degree studies are described in Chapter 1.4. If the applicant's background education has been obtained in a major subject that does not belong to the discipline of the doctoral programme in which the right to pursue doctoral studies is now applied, or if this is otherwise deemed appropriate from the perspective of carrying out the research plan, the applicant may be required to complete supplementary studies. Supplementary studies are specified by the prospective supervisor professor in the personal doctoral study plan and they shall be completed in addition to the specified studies of the doctoral programme. Applicants who have completed their degrees abroad may also be required to complete supplementary studies.

Eligibility requirement is as a rule at least cum laude approbatur or a corresponding grade from the Master's level degree. This requirement may be waived if the board of the doctoral programme so decides on the basis of the research plan. If needed, the board of the doctoral programme can request information about the applicant and research plan from the main supervisor. This written assessment is confidential. With respect to themes of dissertations, the emphasis is on applications that concern the areas of research defined in the research mission of the department. However, applications related to other areas of research in the doctoral programme may also be approved, if a competent supervisor can be appointed for the research work. The application process

is described in chapter 1.5. The main supervisor must be mainly the professor of the Department of Geographical and Historical Studies.

The doctoral programme's management group consists of permanent professors in the three disciplines of the department who have been appointed for two years at a time. The management group processes applications submitted to the faculty after each call of applications three times a year; makes proposals for the faculty on the admission of prospective students to the doctoral programme on the basis of the scientific standard and feasibility of the research plan, the achievability of the doctoral study plan, degree certificates and the statement by the supervisor; and plans the training provided in the doctoral programme in cooperation with doctoral students.

Criteria for assessing the applications include:

- Quality of the research plan: innovativeness of the research topic, feasibility
  of the research plan, clarity and implementation methods of the research plan.
- Scientific and practical relevance of the research topic.
- Performance in Master's studies or corresponding studies.
- International orientation and language skills required in the studies.
- Statement from the professor or docent proposed as main supervisor of the applicant and the research plan

The maximum number of students in the doctoral programme or the annual intake of students is not limited.

#### **HOW TO APPLY**

The application procedure for the right to pursue doctoral studies is described in Chapter 1.5. The Past, Space and Environment in Society Doctoral Programme invites applications three times a year: at the end of September, November and April.

# **DEGREE STRUCTURE AND STUDY REQUIREMENTS**

According to the curriculum of the doctoral programme, the degrees consist of studies in research and professional skills (50 ECTS) agreed with the main supervisor and defined in the personal postgraduate study plan. These studies comprise subject specific studies and transferrable skills studies.

# Structure of the studies

5012003 Subject specific studies 35–40 op should be completed according to the curriculum. A student should choose 10 ECTS min – 20 ECTS max from each module:

- a) Methodology and theory of science
- b) Scientific publishing and conferences
- c) Research seminar and symposium

5012002 Transferrable Skills Studies 10-15 ECTS

Doctoral dissertation or Licentiate thesis

Research seminar is a compulsory study module for all the doctoral students. In addition, it is required that a doctoral student participate in at least two seminars with a variable theme related to methodology and theory of science provided by the doctoral programme once an academic year. If a doctoral student has a justified reason for not participating in the seminars and symposia, he must agree on substitute studies with his main supervisor and the director/board of the doctoral programme.

The student shall complete between 10 and 15 ECTS of transferrable skills studies according to the personal study plan. A course in research ethics must be included in the studies

It is recommended that courses supporting the student's research project are chosen from the courses provided by the University of Eastern Finland's Doctoral School and other courses provided by the university and approved by the supervisor or from the transferable skills studies provided by national doctoral training networks. It also is recommended that studies should include courses in scientific writing and languages.

Furthermore, it is recommended that studies should include courses in quantitative and qualitative methods offered by the Philosophical Faculty and/or Faculty of Social Sciences and Business Studies. If a doctoral student has a justified reason for not participating in the courses provided by the University of Eastern Finland's Doctoral School and/or not completing studies provided by the doctoral school, substitute studies and their manner of completion must be specified in the personal study plan submitted with the application to pursue doctoral studies; or, if the problem occurs during studies, substitute studies must be agreed with the main supervisor and the director/board of the doctoral programme.

Once a year, the doctoral programme arranges a seminar with a variable theme (between 1 and 2 ECTS). Students are expected to participate in at least two such seminars during their studies.

A maximum of 5 ECTS of this module may be completed by teaching university-level courses in the student's discipline. The number of ECTS credits awarded for this activity is assessed by the main supervisor or the director of the doctoral programme on a case-by-case basis.

It is recommended that the general transferable skills studies are completed during the first and the second year of doctoral studies.

# CONTACT PERSONS

Head of the programme Professror Kimmo Katajala and Coordinator Amanuensis Riikka Myllys.

# 2.2.4.2 Doctoral Programme in Business

The Doctoral Programme in Business provides world-class business research expertise that transcends the traditional limits of the discipline. In the doctoral programme, doctoral students work on research projects that follows the research profile specified for both campuses and aim at the degree of Licentiate of Science (Economics and Business Administration) or Doctor of Science (Economics and Business Administration).

## The Objectives of Doctoral programme

The objectives of Doctoral programme in Business are to create general knowledge of business research, theory and methods in order to create abilities for doctoral student to complete licentiate thesis and dissertation. In addition doctoral student deepens the theoretical knowledge in five fields in Business Administration. Internationalization is in focus at Doctoral Programme in Business. Doctoral student is encouraged to build international networks through researcher exchange, conference participation and international research funding.

There are four thematic areas for doctoral students to choose from:

- 1. Business Studies, Innovation Management (Kuopio)
- 2. Business Studies, Service Management (Joensuu)
- 3. Business Studies, Accounting and Finance (Kuopio)
- 4. Business Studies, Business and Law (Joensuu)

Because of its contents and emphases, the doctoral programme in the University of Eastern Finland is different than the doctoral programmes in other business faculties and schools in Finland.

Doctoral studies in business studies aim at familiarising the students with the research, theories and research methods in the field in a way which qualifies the students to prepare a licentiate thesis or a doctoral dissertation. Furthermore, students strengthen their knowledge in their specific specialisation fields. The doctoral programme encourages students to take an international approach: to participate in researcher exchanges, study in foreign universities, make presentations in international conferences, publish in international journals and become members of international researcher networks.

#### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The degrees available in the Doctoral Programme in Business are Licentiate of Science (Business and Administration), Doctor of Science (Business and Administration) and Doctor of Philosophy.

#### **ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA**

The eligibility criteria for doctoral degree studies are described in Chapter 1.4.

- (1) Applicants with a Finnish Master's degree in Economics and Business Administration who have achieved the grade very good (cum laude approbatur) or higher for their pro gradu thesis and the grade very good or higher for their major subject studies.
- (2) Applicants with a Finnish Master's degree in any field who have achieved the grade very good (cum laude approbatur) or higher for their pro gradu thesis and the grade very good or higher for their major subject studies. The applicant's research project must be related to one of the thematic areas of the doctoral programme, and the applicant must have the competencies required in this thematic area.
- (3) Applicants who have acquired abroad a relevant degree which, in the country in question, provides eligibility for further university studies and for pursuing a doctorate. Applicants who have obtained their qualifications abroad must demonstrate their competence to pursue a research project by detailing their major studies (that include a Master's thesis or other similar study project that corresponds to a pro gradu thesis) for which the grade very good or higher has been awarded and which have been completed before applying to the doctoral programme. If the Master's thesis or other study project has been written in a language other than Finnish, Swedish or English, an English summary must be attached to the application. The applicant's research project must be related to one of the thematic areas of the doctoral programme, and the applicant

must have the competencies required in this thematic area.

- (4) Applicants who have completed an internationally accredited (AMBA, AACSB) Master of Business Administration (MBA) degree, if they are able to demonstrate before applying to the doctoral programme that after completing the required supplementary studies, their major subject studies correspond to the level of the major subject studies of a Finnish Master's degree in Economics and Business Administration (including a study project that corresponds to a pro gradu thesis). The applicant must attach to the application a proposal for major subject studies or studies in the thematic area. If the Master's thesis or other study project has been written in a language other than Finnish, Swedish or English, an English summary must be attached to the application. The grade very good or higher must have been awarded for both the MBA degree and the supplementary studies.
- (5) Applicants with a Master's degree completed in a Finnish or foreign University of Applied Sciences who have completed a Master's thesis or other study project that corresponds to a pro gradu thesis as part of their degree. Both the major subject studies and the study project must have been completed and awarded the grade very good or higher before applying to the doctoral programme. Applicants with a Master's degree from a University of Applied Sciences should take into account that the director of the doctoral programme verifies the skills provided by the earlier education, and the professor responsible for the thematic area concerned may require that supplementary studies are to be completed.
- (6) Applicants with a licentiate degree in business and administration from a Finnish or a foreign university.
- (7) Applicants with a licentiate or a doctoral degree in a field other than business and administration from a Finnish or a foreign university. The applicant's research project must be related to one of the thematic areas of the doctoral programme, and the applicant must have the competencies required in this thematic area. If necessary, the professor responsible for the thematic area concerned may require that supplementary studies are to be completed.
- 8) Additionally, commitment of the faculty to appoint two supervisors.

## **HOW TO APPLY**

The application procedure for the right to pursue doctoral studies is described in Chapter 1.5. When applying to the Doctoral Programme in Business, the research plan should, in principle, be prepared in English, as the language of the doctoral programme is English. The research topic should be chosen so that it is possible to write and publish

articles on the topic in English. The research topic should be related to the focus areas of the research conducted in the Department of Business.

The Doctoral Programme in Business invites applications twice a year: at the end of November and April.

## Changing orientation within the Doctoral Programme in Business Studies

Students may apply to change their orientation once during their doctoral degree programme. Students must apply using a free-form application with an up-to-date doctoral study plan, research plan and the approval of the supervising professor attached to the application. Students wishing to change their orientation must first discuss the matter with their supervisors. Applications for changing the orientation can be submitted once a year, at the same time as postgraduate student admission. Free-form applications indicating the grounds for the change must be submitted to the Head of Academic and Student Affairs of the Faculty of Social Sciences and Business Studies.

#### DEGREE STRUCTURE AND STUDY REQUIREMENTS

The studies towards the degree of a Licentiate of Science (Business and Administration) or a Doctor of Science (Business and Administration) to be completed in the doctoral programme consist of a licentiate thesis or a doctoral dissertation, transferable skills studies (10 ECTS) and subject-related doctoral studies (30 ECTS); the total scope of the studies is 40 ECTS.

Compulsory studies (40 ECTS), which are required in addition to writing a licentiate thesis or a doctoral dissertation, are confirmed in the student's personal postgraduate study plan. Participation in research seminars is mandatory for everyone. Seminars and other courses are held in English if there are participants who do not speak Finnish. For this reason, the course descriptions are published in English. Students who do not hold an MSc (Economics and Business Administration) may be required to complete supplementary studies (15-30 ECTS). These studies are also specified in the doctoral study plan.

Doctor of / Licentiate in Science (Business and Administration)
Transferable skills studies, 10 ECTS
Studies in the discipline and field of research, 30 ECTS
A doctoral dissertation or licentiate thesis

Participation in research seminars is mandatory for everyone. The seminar and other courses are held in English if there are participants who do not speak Finnish. Students who do not have the degree of Master of Science (Economics and Business Administration) may be required to complete supplementary studies (between 15 and 30 ECTS). These studies are also specified in the doctoral study plan.

The following courses are suitable for doctoral studies:

- doctoral courses (and suitable advanced studies courses) provided by the Department of Business
- doctoral courses (and suitable advanced studies courses) provided by the faculty
- doctoral courses (and suitable advanced studies courses) provided by other faculties and departments
- courses provided by national doctoral education programmes (The Finnish doctoral program in business studies (KATAJA), Law in a Changing World (LCW), and others)
- general doctoral courses provided by the University of Eastern Finland
- doctoral courses, summer schools and seminars organised by foreign universities

## Transferable skills studies, 10 ECTS

- Research Methodologies and Methods 6 ECTS
- Academic Writing, max 6 ECTS
- Philosophy of Science and Research Ethics, max 6 ECTS
- Other doctoral level courses provided by graduate schools and universities

## Studies in the discipline and field of research, 30 ECTS

## 5214900 Accounting and Finance, 30 ECTS

Courses on Accounting and Finance Theory and Research

5214902 Research Seminar for Doctoral Students, Accounting and Finance 6 ECTS (compulsory course, active participation during two academic years, research presentation every semester)

5214907 Research Methods Related to Own Research Project, 6 ECTS

5214904 Financial Accounting Theory, 6 ECTS

5214905 Management Accounting Theory, 6 ECTS

5214906 Corporate Finance Theory, 6 ECTS

5212906 Advanced Financial Statement Analysis, 6 ECTS

5214908 Empirical Corporate Finance, 6 op

5214910 Other Accounting and Finance Related Doctoral Level Courses

## 5212900 Business and Law. 30 ECTS

Courses on Business and Law Theory and Research:

5212902 Research Seminar for Doctoral Students, Business and Law 6 ECTS (compulsory course, active participation during two academic years, research presentation every semester)

5212908 Research Methods Related to Own Research Project, 6 ECTS

5212903 Research Traditions in Business and Law, 6 ECTS

5214904 Financial Accounting Theory, 6 ECTS

5212907 Business Law Theory, 6 op

5212910 Other Business and Law Related Doctoral Level Courses

# 5213900 Innovation Management, 30 ECTS

Courses on Innovation Management Theory and Research

5213902 Research Seminar for Doctoral Students, Innovation Management 6 ECTS (compulsory course, active participation during two academic years, research presentation every semester)

5213908 Research Methods Related to Own Research Project, 6 ECTS

5213903 Research Traditions in Innovation Management, 6 ECTS (compulsory course)

5213904 Management and Organization Theory, 6 ECTS

5213905 Strategic Management Theory, 6 ECTS

5211904 Marketing Theory, 6 ECTS

5213323 Health and Wellbeing Business, 6 ECTS

5213910 Other Innovation Management Related Doctoral Level Courses

# 5211900 Service Management, 30 ECTS

Courses on Service Management Theory and Research

5211902 Research Seminar for Doctoral Students, Service Management 6 ECTS (compulsory course, active participation during two academic years, research presentation every semester)

5211905 Research Methods Related to Own Research Project, 6 ECTS

5211903 Research Traditions in Service Management, 6 ECTS

5211904 Marketing Theory, 6 ECTS

5213904 Management and Organization Theory, 6 ECTS

5211906 Leadership and Organizational Change, 6 ECTS

5211907 Research on Tourism and Leisure Business, 6 ECTS

5211910 Other Service Management Doctoral Level Courses

## 5216900 International Business and Sales Management, 30 ECTS

Courses on International Business and Sales Management Theory and Research 5216902 Research Seminar for Doctoral Students, International Business and Sales Management (compulsory course), 6 ECTS

5216908 Research Methods Related to Own Research Project, 6 ECTS

5213903 Research Traditions in International Business and Sales Management, 6 ECTS (compulsory course)

5213904 Management and Organization Theory, 6 ECTS

5213905 Strategic Management Theory, 6 ECTS

5211904 Marketing Theory, 6 ECTS

5216910 Other International Business and Sales Management Related Doctoral Level Courses

#### CONTACTS

Head of the Programme Professor Mika Gabrielsson and Amanuensis, Ms. Sari-Johanna Karhapää.

## 2.2.4.3 Doctoral Programme in Law

The doctoral degrees available at the Department of Law are Doctor of Law (LL.D.) and Doctor of Philosophy (Ph.D.). Postgraduate students who have been granted the right to pursue the degree of Doctor of Administrative Sciences (D.Sc. (Admin.) prior to 1 August 2013 may complete the degree. After this date, new students will not be admitted to this degree.

Students pursuing the Licentiate or Doctor of Law can major in one of the following: financial law, European law, administrative law, international law, commercial law, legislative studies, law and economics, family and inheritance law, procedural law, criminal law, civil law, social welfare law, labour law, constitutional law, general jurisprudential studies or environmental law.

Students in philosophy can pursue the Licentiate of Social Sciences and Doctor of Social Sciences degrees. No new students have been admitted since 1 January 2012.

Students pursuing a Licentiate or Doctor of Administrative Sciences may major in one of the following subjects: European law, financial law, administrative law, law and economics and legislative studies, criminal and procedural law and criminology, civil law, constitutional law and environmental law. Students majoring in any of these subjects can pursue the degree of Doctor of Philosophy.

#### ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

The right to pursue the Licentiate of Law or Doctor of Law can be awarded to applicants who have completed a Master's degree in Law and who are considered to have sufficient competences to complete the degree, based on their performance in earlier studies (particularly the merits and grade of the written final work included in the degree), possible publications or research activities and the research plan. A Master's degree in Law refers to a Master of Law, Master of Administrative Sciences (Public Law) and a corresponding foreign degree. Other higher university degrees can correspond to these degrees if they involve an equivalent scope of university-level studies in law or the applicant can otherwise demonstrate that he or she has completed such studies. If another degree does not include a corresponding scope of legal education or the applicant cannot demonstrate that he or she has completed such studies, those applying for the right to pursue the Master of Law or Doctor of Law are required to complete supplementary legal studies before they are admitted to pursue postgraduate studies. The leadership group of the doctoral degree programme decides on the content of the supplementary studies.

The right to pursue the Licentiate of Law or Doctor of Law will not be granted to those who have previously completed the Licentiate of Administrative Sciences (Public Law) or Doctor of Administrative Sciences (Public Law) at the University of Eastern Finland.

The right to pursue the Licentiate of Philosophy or Doctor of Philosophy can be awarded to applicants who have completed a Master's degree in Finland or abroad or a relevant polytechnic Master's degree and who are deemed to have sufficient competences required to complete the degree, based on their performance in earlier studies (especially the merits and grade of the written final work included in the degree), possible publications or research activities and the research plan. Applicants are expected to have completed legal education of a sufficient scope to support their efforts to write a licentiate thesis or a doctoral dissertation. When assessing the sufficiency of legal education, particular attention is paid to the links between previous studies and the research topic and methodological studies in law. If the applicant lacks the expected scope of legal education or they are required to complete supplementary studies in law before

they are granted the right to pursue studies leading to the Doctor of Philosophy. The leadership group of the doctoral degree programme decides on the content of the supplementary studies.

The master's thesis of a doctoral student applicant should have been awarded the grade of cum laude approbatur or higher. This requirement may be waived if the board of the doctoral programme so decides. Applicants may demonstrate their eligibility for doctoral studies also by means of a research plan

Postgraduate students already admitted to pursue the Licentiate of Administrative Sciences (Public Law) or Doctor of Administrative Sciences (Public Law) or Licentiate of Philosophy or Doctor of Philosophy can apply for the right to pursue the Licentiate of Law or Doctor of Law if they meet the criteria referred to above for students applying for these degrees. Postgraduate students must indicate their reasons for wishing to change their degree programme in their application.

If an applicant pursuing the Licentiate of Administrative Sciences (Public Law) or Doctor of Administrative Sciences (Public Law) or Licentiate of Philosophy or Doctor of Philosophy is granted the right to pursue the Licentiate of Law or Doctor of Law, any post-graduate studies completed in the faculty will be counted in full towards the new degree. The equivalence between the previous courses and the current courses will be agreed upon on a case-by-case basis. The equivalence of general studies is assessed by the person responsible for general studies (Professor Toomas Kotkas). The equivalence of special studies is assessed by the supervisor.

#### HOW TO APPLY

The application process is described in chapter 1.5.

Before submitting their application, doctoral applicants are required to have contacted the professor of the subject they are intending to pursue and to have presented their research plan for the doctoral dissertation. Where necessary, the research plan is supplemented on the basis of discussions with the prospective supervisor. Applicants should draw up their research plan carefully, as the plan will play a significant role when the applicant's ability to complete a doctoral degree is being assessed. Although the professor who has agreed to supervisor the research project may offer his or her advice, the research plan is drawn up independently by the applicant. Supervision of the postgraduate studies and the research project will only begin after the right to pursue the studies

has been granted. For a research plan template, please visit the website of the Law School's doctoral programme.

Before submitting their application, doctoral applicants should contact the professor of the subject they are intending to pursue and discuss the research topic, research plan and the supervision of their doctoral studies. Before submitting the application, applicants must obtain the professor's consent that he or she will supervise their research. The applicant must ask the professor to confirm such consent by the signature of the application form, or by providing proof of consent by corresponding means, such as by attaching a printout of an email received from the professor, indicating the professor's consent, to the application.

Two supervisors are named for doctoral students. One of them must hold a professor's or a docent's title with the University of Eastern Finland, or have a corresponding qualification and be a member of staff in the Faculty of Social Sciences and Business Studies and be a member of the supervisory staff of the doctoral programme.

Recommended length of a research plan is approximately ten pages, and it must detail the following:

- Background of the research project, the meaningfulness and scientific relevancy of the chosen topic, and any earlier studies related to the theme.
- Objectives of the research project; research tasks and questions.
- Research methods and materials and the processing of the materials.
- A work plan and plans for subtasks; particularly in case of doctoral dissertations consisting of articles, it is important to describe the parts from which the study consists and which serve as the basis for reporting.
- Planned schedule and funding.
- Publication plan.
- An assessment of the potential uses and the social significance of the research results

Applications for the right to pursue postgraduate studies are submitted using the university's joint application form. The application and the attachments are submitted to the Faculty of Social Sciences and Business Studies. The following documents must be attached to the application:

- a copy of the qualification certificate with its enclosed transcript of studies (if
  the certificate has been awarded by a university other than the UEF, the copies must be certified);
- the research plan and other necessary permits;
- a free-form motivation letter of approximately one page, in which the applicant provides grounds for his or her interest in pursuing postgraduate studies at the University of Eastern Finland in the Doctoral Programme in Law.

The Doctoral Programme in Law invites applications three times an academic year: at the end of September, November and April.

The decision on doctoral student admissions is made by the Dean of the faculty on the basis of a statement by the leadership group of the doctoral programme. Where necessary, the leadership group of the Doctoral Programme in Law may interview individual applicants before issuing their statement. The secretary of the leadership group will contact the interviewees to arrange such interviews.

The leadership group of the doctoral programme reviews the applicant's research plan, previous studies and interview to assess whether the applicant has adequate general theoretical and methodological skills for the planned doctoral studies. The following criteria are applied to the application assessment:

- the quality of the research plan, unique nature of the research topic, and scientific and practical significance of the research topic;
- feasibility of the research plan;
- previous research: scientific publications, working as a researcher, obtained funding;
- performance in earlier studies;
- international orientation and language skills required in the studies;
- research funding.

The Dean decides on granting the right to pursue doctoral studies, appoints the supervisors and approves the research plan. The faculty informs each candidate of the decision by post.

#### DEGREE STRUCTURE AND STUDY REQUIREMENTS

The degrees include 50 ECTS of studies supporting the research project and professional competence. The objective is to familiarise the student with the research, theories and

research methods in the field to qualify the student to prepare a licentiate thesis or a doctoral dissertation.

The doctoral study plan specifies the courses which can be included in the studies supporting the research project and professional competence (50 ECTS). The 50 ECTS consists of 25 ECTS of general theoretical and methodological studies in the field of law, 15 ECTS of in-depth specialisation studies in the student's specific field of research and 10 ECTS of general transferable skills studies.

Studies supporting the research project and professional competence (50 ECTS) must be completed and registered as completed before the doctoral dissertation is submitted for preliminary examination.

# **5312101** STUDIES SUPPORTING THE RESEARCH PROJECT AND PROFESSIONAL COMPETENCE 50 ECTS

General Transferrable Skills Studies 10 ECTS

Teaching and expert tasks 10 ECTS

**Subject Specific Studies 40 ECTS** 

General Part 25 ECTS - Theoretical and methodological studies

Special Part 15 ECTS - Familiarisation with the student's specific field of research

5312201 Doctoral Dissertation

# 5312101 STUDIES SUPPORTING THE RESEARCH PROJECT AND PROFESSIONAL COMPETENCE 50 ECTS

## General Transferrable Skills Studies 10 ECTS

5312109 Teaching and expert tasks 10 ECTS

Courses provided by the UEF Doctoral School

## Subject Specific Studies 40 ECTS

General Part 25 ECTS - Theoretical and methodological studies

5312103 Literature, general part 5 op

5312104 Method seminar 5 ECTS

5312105 Participation in Law School's Doctoral Seminar 5 ECTS

# Choose 10 ECTS of the following courses:

5311910 Legal Theory 5 ECTS

5311912 Legal Argumentation 5 ECTS

5311913 Analyzing Cases of Supreme Courts 5 ECTS

5311914 Seminar: Research of Lawmaking 5 ECTS

5311915 Analyzing Cases of Supreme Courts 5 ECTS

5311916 Empirical Research of Law, seminar 5 ECTS

5311917 Case Analysis Group 5 ECTS

5311922 Philosophy of Law 5 ECTS

5311918 Classics of Legal Theory 5 ECTS

5311921 Research Methods in Criminology 5 ECTS

5311923 Comparative Law 5 ECTS

5311924 Historical, Theoretical, and Axiological Foundations of the European Legal

Culture 5 ECTS

5311925 Legal History 5 ECTS

5311927 Sociology of Law 5 ECTS

5311928 Introduction to Basics of Quantitative Research in Law 2 ECTS

5311929 Qualitative Approaches for Empirical Legal Research 4 ECTS (uusi opintojakso)

Special Part 15 ECTS - Familiarisation with the student's specific field of research

5312106 Literature, special part

5312107 Publications

5312108 Conferences

## 5312102 Lisentiate Thesis

## 5312201 Doctoral Dissertation

The general quality of a licentiate thesis or a doctoral dissertation shall be assessed according to the following criteria in particular:

- 1) Relevancy of the research task and the appeal of the research problem: Assessment emphasises the innovativeness and scientific relevancy of the research task.
- 2) Level of sophistication and the management of methods necessary for research: Assessment pays special attention to the skills necessary for complementing the research task. Sophistication means both adequate expertise in the field of research and the student's general knowledge and understanding of the academic subject and the area of research.
- 3) Practical implementation of the research project: Assessment focuses on the functionality of the structure of the study, the delimitation of the scope, the degree of sophistication in finishing and the stylistic aspects.
- 4) Results of the research project, their novelty, validity and importance: In the field of law, results of a research project cannot often be distinguished from other elements of research, as this is a matter of different interpretations and their justification. This further highlights the importance of overall assessment.
- 5) The author's ability to defend the research project in public: An integral part of a presentation of a doctoral dissertation or a licentiate thesis is that the author is able to defend appropriately the work in public. A licentiate thesis or a doctoral dissertation may be approved if it meets the minimum requirements of each criterion. The grades for a licentiate thesis or a doctoral dissertation are approbatur, lubenter approbatur, non sine laude approbatur, cum laude approbatur, magna cum laude approbatur and laudatur. The subject and the grade of the licentiate thesis or a doctoral dissertation are indicated in the degree certificate.

## Supervision of doctoral students

Two supervisors are appointed for each doctoral student. The supervisors are appointed after the board of the doctoral programme has decided to recommend the student's application for pursuing doctoral studies. A supervision agreement shall be drafted between the doctoral student and the supervisors, and the tasks of the supervisor, the doctoral student, the department and the doctoral programme are specified as follows:

#### THE ROLE OF THE SUPERVISOR:

- 1. The supervisor shall ensure that the various elements of supervision are observed throughout the research project. This means that the supervisor is expected to recognise the individual needs of doctoral students and to motivate and encourage them throughout their research project. The supervisor is also committed to developing his/her skills and expertise as a supervisor.
- 2. The supervisor shall be genuinely committed to the project to be supervised. Before agreeing to act as a supervisor, the supervisor assesses his/her possibilities and resources for working as a supervisor, considering his/her expertise, earlier supervising tasks and other duties. The supervisor helps the doctoral student in arranging funding for the project.
- 3. The supervisor supports the doctoral student's independence and development as a researcher and as an expert; in other words, the student's growth as a member of the research community. The supervisor may, for example, encourage the doctoral student to publish results of the study project during the doctoral studies; offer the student teaching tasks related to the student's research topic; help the student in networking activities both in Finland and abroad; contribute to ensuring that the student receives enough feedback and support from peers; contribute to ensuring that the student has adequate links to the practical world of work; and instruct to the student in making preparations for the public examination of the doctoral dissertation.
- 4. The supervision of the research project shall be based on close interaction between the supervisor and the student. The supervisor meets the doctoral student several times a year; within a reasonable time carefully reads the texts and other materials provided by the student; gives instructive and sincere feedback; and provides guidance in scientific writing.
- 5. The supervisor observes the principles of research ethics in all supervisory tasks. This means, for example, that the supervisor directs the doctoral student's attention towards aspects of research ethics and the rules of scientific writing; does not exploit the student's research results and keeps in mind that a finished doctoral dissertation is not authored by the supervisor but by the doctoral student.
- 6. If problems occur, the supervisor is committed to solving them together with the other supervisor and the student. The supervisor does not object if the doctoral student wishes the supervision arrangement to be changed. The supervisor may request to be exempted from the task if the supervising relationship does not function properly, in spite of efforts to improve it.

## THE ROLE OF THE DOCTORAL STUDENT:

- 1. The doctoral student shall be genuinely committed to the research project. The student should aim for the highest scientific quality obtainable, strive to improve him/herself as a researcher and as an expert and always follow the rules of research ethics.
- 2. The doctoral student supports the systematic progress of the research project. The student should strive to stay on schedule; keep track of the supervision activities by, for example, preparing summaries of the main contents of supervision meetings and submitting them to the supervisor; inform the supervisor of any changes in plans or the research task; and contact the supervisor if the student is of the view that the supervision activities need improvement. If problems occur, the solution should first be sought between the doctoral student and the supervisor, and if a satisfactory solution is not found, the doctoral student and the supervisor may contact the board of the doctoral programme.

# THE ROLE OF THE DEPARTMENT AND THE BOARD OF THE DOCTORAL PROGRAMME:

- 1. The Department of Law shall ensure that doctoral students working in the department are not unduly burdened with administrative tasks and that they can have the annual holidays outlined in the department strategy.
- The department strives to divide the teaching responsibilities of the doctoral students working in the department so that the teaching is related to the students' specific fields of research.
- 3. The board of the doctoral programme processes students' applications to pursue doctoral studies before the Dean makes a decision on them, and provides feedback to the students.
- 4. The board of the doctoral programme asks, on a regular basis, the doctoral students to provide feedback, and develops the contents and supervision practices of the department's doctoral programme.
- 5. The board of the doctoral programme strives to find solutions to problems in doctoral studies and supervision relationships.

## CONTACTS

Head of the Programme Professor Toomas Kotkas and Coordination: Researcher, Ms. Hanna Partinen

# 2.2.4.4 Welfare, Health and Management Doctoral Programme

The Doctoral Programme in Well-Being and Health Research, the Doctoral Programme in Social and Health Management and the Doctoral Programme in Social Work and Social Services merged on 1 August 2015, forming the Doctoral Programme in Welfare, Health and Management (WELMA). Within the strategy of the University of Eastern Finland, the new programme has strong links with emerging research fields in the social sciences and business studies: I Welfare failures and II Effectiveness of social and health care. Areas of interest in this multidisciplinary doctoral degree programme concern research into the conditions, structures and processes of welfare and social and health care. The programme will focus on the issues surrounding welfare failures, the effectiveness of social and health care and steering. The purpose of the doctoral programme is to produce researchers and specialists in the areas of welfare and social and health care and to strengthen the theoretical and methodological basis and the philosophy of science in this field.

#### DEGREES AVAILABLE IN THE DOCTORAL PROGRAMME

The WELMA Doctoral Programme will provide the following degrees in these major subjects:

Degree	Major Subject
Doctor of Philosophy	all major subjects
Licentiate in and Doctor of Arts (Psychology)	Psychology
For entry to the degree, the applicant must have	
completed a Master's degree majoring in psy-	
chology or another corresponding degree and	
providing the applicant with a professional li-	
cence to work as a psychologist.	
Licentiate in and Doctor of Health Sciences	Health and Human Services Informatics,
	Health Management Sciences, Health Eco-
	nomics
Licentiate in and Doctor of Social Sciences	Health and Human Services Informatics, So-
	cial Management Sciences, Social Peda-
	gogy, Social Psychology, Social Work, Soci-
	ology and Social Policy

# ELIGIBILITY FOR DOCTORAL DEGREE STUDIES AND ADMISSION CRITERIA

The eligibility criteria for doctoral degree studies are described in section 1.4. The student admission criteria are a Master's degree and advanced studies in a major subject included in the doctoral degree programme, or another relevant subject or relevant degree completed abroad.

## Admission criteria

- 1) Quality of the research plan: clarity, innovativeness, feasibility, implementation method and consideration of ethical questions
- 2) Scientific and social relevant of the research topic and links to the profile of the doctoral programme
- 3) Evidence of previous research, such as grades of final papers, publications, work experience, obtained funding
- 4) Sufficient resources for supervision. Students pursuing the doctoral degree programme must be able to name at least one supervisor on the programme. External supervisors are also admitted.

# Supplementary studies

Students may be required to complete supplementary studies of no more than 30 ECTS.

#### HOW TO APPLY

Applications to the doctoral degree programme are submitted using the university's joint application form. The application deadlines are at the end of September and end of February each year. The application procedure is described in section 1.5 and on the faculty's website.

#### DEGREE STRUCTURE AND STUDY REQUIREMENTS

The degree includes the licentiate thesis or the doctoral dissertation and 50 ECTS of studies supporting research and professional competence, which are split into general transferable skills and studies in the discipline and field of research in question.

Studies supporting the research project and professional competence 50 ECTS

## Transferable skills studies 15 ECTS

- UEF Doctoral School courses 10 ECTS
- The WELMA Doctoral Programme seminar 5 ECTS (25 September 2015 with a joint beginning for all new postgraduate students (one meeting in the autumn and one in the spring, January 2016)), the Department of Social Sciences

# Studies in the discipline and field of research 35 ECTS

#### Compulsory

- Subject-specific research group seminars 5 ECTS. May include the course in *Plan-ning and implementation of the research process 3 ECTS*. (mandatory for at least some major subjects)
- Scientific presentation of research problems 5 ECTS, the Department of Health and Social Management (mandatory for at least some major subjects)
- Research method studies 10 ECTS
  - Research method studies organised by the Philosophical Faculty and the Faculty of Social Sciences and Business Studies
  - Other studies in research methods

#### Elective

- Reading for postgraduate students 5 ECTS, the Department of Health and Social Management (mandatory for at least some major subjects)
- Effectiveness of social and health care 5 ECTS, the Department of Health and Social Management and the Department of Social Sciences
- Welfare failures 5 ECTS, the Department of Social Sciences

Supervision of work and professional reflection 5 ECTS, Psychology

Students should consult the course descriptions to see whether the course is mandatory for their major subject.

Disciplinary-specific postgraduate education can also be counted towards specialisation studies.

## **CONTACT PERSONS**

Head of the programme Professor Sari Rissanen and Amanuensis Piia Puurunen.

## 2.2.4.5 Doctoral Programme in Social and Cultural Encounters

See the description from the chapter 2.2.1.1.

# 2.3 REQUIREMENTS FOR LICENTIATE THESIS AND DOCTORAL DISSERTATION

The most important part of the doctoral degree is research in the main subject field, resulting in a licentiate thesis or a doctoral dissertation.

#### LICENTIATE THESIS

The licentiate thesis demonstrates the student's in-depth knowledge of the field of research as well as his/her ability to apply the methods of scientific research into practice both independently and critically.

The licentiate thesis can be a single piece of research (a monograph). Alternatively, it can consist of a sufficient number of scientific publications, or manuscripts accepted for publication, accompanied with a summary, which examine the same set of problems. The licentiate thesis can also be another scientific work which meets the same criteria. If the thesis is a collection of separate publications or manuscripts, their total must have the scientific value required of a licentiate thesis.

If the licentiate thesis consists of scientific publications or manuscripts accepted for publication which examine the same set of problems and are accompanied by a summary, the summary must specify the research background, aims, methods, results and conclusions. The summary is given a separate title. It must be written so as to avoid unnecessarily repetition of what has already been written in the articles. Rather, the summary

organises and draws conclusions from information which has been published in the research field and which the postgraduate student's articles have significantly increased. The summary also discusses new problems yet to be solved. The summary is usually written for the licentiate thesis, but it can also have been published in a scientific journal.

If the publications include collaborative works, the postgraduate student's independent contribution must be attested. The author must specify his/her part in the publication by writing a clarification. The student's supervisors are asked to give a statement about the clarification. If justified, the same publication can also be included in another licentiate thesis.

#### DOCTORAL DISSERTATION

The doctoral dissertation demonstrates the student's in-depth knowledge of the field of research, related fields and the philosophy of science. Furthermore, the dissertation demonstrate his/her ability to apply the methods of scientific research into practice both independently and critically in his/her field of research as well as independently generate new information.

According to the Recommendation of the Finnish Council of University Rectors (7 December 1998), a dissertation shall:

- 1. show the doctoral abilities in independent research work,
- 2. form a coherent whole
- 3. be based on original idea and aims; and
- 4. present new results or ideas.

## A dissertation can be:

- a monograph
- article-based or compilation dissertation which comprises a sufficient number of publications, or manuscripts accepted for publication dealing with the same set of problems:
  - a)In addition to the articles, the dissertation includes a summary b)The articles form the chapters of the dissertation. In addition to article chapters, the dissertation usually also includes an introductory chapter and a chapter for conclusions.

In the summary of the compilation, the doctoral candidate presents the background, aims, methods, results and conclusions of the research. A name is given to the dissertation. The purpose of the article-based dissertation is not to unnecessarily copy sections of the articles included in it but to arrange and interpret the information introduced in those publications. In addition, the author looks at new problems that are to be solved.

If one or more articles that form a part of the dissertation are joint publications, the doctoral candidate must provide a written clarification on his/her individual contribution to them. The student's postgraduate supervisors are asked to give an opinion on the clarification. For a justified reason, the same article may be used as a part of another doctoral dissertation as well

# 2.3.1 Philosophical Faculty

An eligible doctoral dissertation may be a monograph or a collection of research articles. A collection of research articles consists of scientific publications or manuscripts, outlined in an independent summary, which examine the same set of problems. The number of articles required is determined by the Philosophical Faculty. A doctoral dissertation in the form of a collection of research articles contains at least three peer-reviewed articles of which two must have been published and one must have been approved for publication. An article published in advance by a publication series as an online article is considered to be published. If the publications include collaborative works, the doctoral candidate must attest to his/her independent contribution either in the summary or in a separate appendix. The doctoral candidate must be the main author of at least three articles. A collaborative publication may be included in no more than two person's licentiate theses or doctoral dissertations.

An eligible licentiate thesis may be a monograph or a collection of research articles. A collection of research articles consists of scientific publications or manuscripts, outlined in an independent summary, which examine the same set of problems. The number of articles required is determined by the Philosophical Faculty. A collection of research articles consists of at least two peer-reviewed articles approved for publication. If the publications include collaborative works, the author of the licentiate thesis must attest to his/her independent contribution either in the summary or in a separate appendix. The author of the licentiate thesis must be the main author of at least two articles. A collaborative publication may be included in no more than two person's licentiate theses or doctoral dissertations.

# 2.3.2 Faculty of Science and Forestry

A licentiate thesis or a doctoral dissertation can be either a monograph or a collection of research articles. A licentiate thesis or a doctoral dissertation can be a scientific account based on independent research which is deemed to increase knowledge in the field in question (a monograph). A licentiate thesis or a doctoral dissertation can consist of a sufficient number, determined by the university, of scientific publications discussing the same set of problems (article-based or compiled dissertation). They can be either published or intended/accepted for publication, and they are outlined in a separate summary.

In the Faculty of Science and Forestry, the structure of an article-based doctoral dissertation is the following: Typically the dissertation contains three to five scientific publications, at least two or at least 50 per cent of which have been published or accepted for publication in international, scientific peer review series. In the case of collaborative publications, the author's independent contribution must be attested. The dissertation must also include a clarification of the author's contribution to collaborative publications

An article-based licentiate thesis is shorter than a doctoral dissertation, but the same instructions apply.

# 2.3.3 Faculty of Health Sciences

A licentiate thesis or a doctoral dissertation can be a single study (a monograph) or consist of a sufficient number of scientific publications discussing the same set of problems, accompanied by a summary. At least 50 per cent of the publications are to have been published or accepted for publication in international, scientific peer review series. In the case of collaborative publications, the author's independent, sufficiently substantial contribution must be attested. For justifiable reasons the same publication can also be used as a part of another doctoral thesis.

# 2.3.4 Faculty of Social Sciences and Business Studies

# FORMS AND PUBLICATION OF A LICENTIATE THESIS

A licentiate thesis may be

- (a) a single study (a monograph)
- (b) at least two peer-reviewed articles discussing the same set of problems, one of which

must be published and the other accepted for publication. Other articles may be manuscripts intended for publication. If the peer-reviewed articles are collaborative publications, the author of the doctoral dissertation must be the principal author in at least two articles

An article published in advance by a publication series as an online article is considered to be published.

In the field of business studies, the licentiate thesis can also be essay-based. In this case, the licentiate thesis consists of at least two published or unpublished, independent texts which discuss the same research problem or set of problems. Some of the independent texts may be scientific articles or other publications while others may be unpublished essays.

Both article-based and essay-based licentiate theses must include an introduction and a summary of the articles/essays. The introduction and the summary can be either at the beginning of the thesis or provided separately. If the articles/essays have been written collaboratively, the author must specify his/her part in the publication by writing a clarification when submitting the licentiate thesis for examination. A collaborative publication may be included in two licentiate theses at most.

#### FORMS AND PUBLICATION OF A DOCTORAL DISSERTATION

A doctoral dissertation can be:

- (a) a single study (a monograph)
- (b) at least three peer-reviewed articles discussing the same set of problems, one of which must be published and two must be accepted for publication. Other articles may be manuscripts intended for publication. If the peer-reviewed articles are collaborative publications, the author of the doctoral dissertation must be the principal author in at least two articles.

An article published in advance by a publication series as an online article is considered to be published.

In business studies, a doctoral dissertation can also be essay-based. An essay-based doctoral dissertation consists of at least three published or unpublished, independent texts which discuss the same research problem or set of problems. Some of the independent texts may be scientific articles or other publications while others may be unpublished essays.

Both the article-based and the essay-based doctoral dissertations must include an introduction and a summary of the articles/essays. The introduction and the summary can be either at the beginning of the doctoral dissertation or provided separately. If the articles/essays have been written collaboratively, the author must specify his/her part in the publication by writing a clarification when applying for permission for the public examination. A collaborative publication may be included in no more than two doctoral dissertations.

Separate instructions have been issued on publishing a doctoral dissertation.

## 2.4 DOCTORAL SCHOOL OF THE UNIVERSITY OF FASTERN FINLAND.

All doctoral students in the University of Eastern Finland are automatically students of the University of Eastern Finland's Doctoral School. The Doctoral School coordinates and develops doctoral studies at the university and provides courses, peer support and guidance for doctoral students. The Doctoral School also publishes this Doctoral Curricula.

The Doctoral School provides transferable skills studies jointly for all doctoral students at the university. The courses are open to all doctoral students at the university.

Courses provided by the University of Eastern Finland's Doctoral School in the academic year 2015-2016 (for course descriptions, registration and schedules, see WebOodi: https://wiola.uef.fi/weboodi/). Language of the course title refers to study language of the course.

Autumn Term 2015	Campus
1145003 Research Ethics, 1 ECTS	JNS & KUO
1145005 Orientation to Postgraduate Studies	JNS & KUO
1145014 Orientation to Doctoral Candidates	JNS & KUO
1145012 Business for PhD Students, 2 ECTS	JNS (every other year in KUO)
1145013 International Research Projects and Cooperation, 1-3 ECTS	JNS (video connection to KUO and SNL)
5215207 Oman osaamisen tuotteistaminen, 2 ECTS	web
8010052 Tieteellinen kirjoittaminen jatkokoulutettaville, 2 ECTS	JNS
8010060 English for Postgraduate Students, 4 ECTS	JNS & KUO
8010061 Conference English, 3 ECTS	JNS & KUO
8020240 Tiedonhaun kurssi jatkokoulutettaville, 2 ECTS	JNS & KUO
8020250 Information Skills for Postgraduate Students, 2 ECTS	KUO
8022010 Julkaisutoiminnan ja tutkimuksen arvioinnin perusteet, 1 ECTS	JNS

Spring Term 2016	Campus
1145004 Scientific Thought and the History of Science, 1,5-3 ECTS	JNS & KUO
1145005 Orientation to Postgraduate Studies	JNS & KUO
1145014 Orientation to Doctoral Candidates	JNS & KUO
1145006 Tutkimusprojektin hallinta, 2 ECTS	JNS (every other year in KUO)
1145010 Research Supervision, 1 ECTS	KUO (every other year in JNS)
5215208 Yrityksen perustaminen, 2 ECTS	web
8010051 Mediaviestintä jatkokoulutettaville, 2 ECTS	KUO (every other year in JNS)
8010052 Tieteellinen kirjoittaminen jatkokoulutettaville, 2 ECTS	KUO
8010060 English for Postgraduate Students, 4 ECTS	JNS & KUO
8010061 Conference English, 3 ECTS	JNS & KUO
8020240 Tiedonhaun kurssi jatkokoulutettaville, 2 ECTS	JNS & KUO
8020250 Information Skills for Postgraduate Students, 2 ECTS	JNS
8022010 Julkaisutoiminnan ja tutkimuksen arvioinnin perusteet, 1 ECTS	KUO

General transferable skills studies may also include studies in university pedagogics. For more information on the university pedagogics courses (30 ECTS in total), see http://www.uef.fi/web/opinto-ja-opetuspalvelut/yo\_pedagogiikka.

The Language Center of the UEF has Writing Clinic activity for doctoral students. The Writing Clinic offers a one-on-one support service for post graduate students who want to improve their texts and develop better writing skills. Further information and appointments: <a href="http://www.uef.fi/fi/kielikeskus/writing-clinic">http://www.uef.fi/fi/kielikeskus/writing-clinic</a>

## 2.5 GUIDELINES FOR SUPERVISION OF DOCTORAL STUDENTS

It is recommended that the supervisor and the doctoral student prepare a mutual supervision guideline that details the practices of supervision, reporting and possible feedback.

## The duties of a doctoral student:

- 1. To discuss the selected research topic with the supervisor considering the doctoral student's personal aims and research objectives.
- 2. At the beginning of the studies, to prepare, under the guidance of the supervisor, a preliminary research plan; to detail the content of the research project, objectives, methods and schedules.
- 3. At the beginning of the studies, to prepare, together with the supervisor, a personal doctoral study plan which supports the research project and the student's career plans.
- 4. To study the ethical issues of scientific research and follow good scientific practice in the research project. The primary responsibility for the application of good scientific practice belongs to every researcher; to ensure that the necessary permits for the research project have been obtained.
- 5. To study the field of research and its theoretical principles, previous findings, theories and methods at the very beginning of the research project and follow the literature in the field.
- 6. To conduct independent research according to the research plan and to follow the doctoral study plan.
- 7. To ensure funding for the research project together with the supervisor.
- 8. To report on the progress of the research project regularly to the supervisor, any monitoring group and, if necessary, the bodies which have funded the research project; to provide feedback to the supervisor and be honest about any problems related to the doctoral studies.
- 9. To register with the university every year either as an attending or as a non-attending student
- 10. To apply for permission for the public examination, to place the doctoral dissertation on public display, to publish the dissertation, to take care of practical arrangements of the public examination, to defend the dissertation and to apply for a degree certificate after completing the studies listed in the personal doctoral study plan.

## The duties of a supervisor:

1. To provide guidance in the selection of the research topic considering the doctoral student's personal aims and research objectives.

- 2. At the beginning of the studies, to provide help in the preparation of a research plan; to detail the content of the research project, objectives, methods and schedules together with the student; to ensure that the research plan is feasible.
- 3. At the beginning of the studies, to help the student prepare a personal doctoral study plan which meets the requirements set by the faculty and supports the research project and the student's career plans.
- 4. To detail the ethical issues of scientific research to the student and ensure that good scientific practice is followed in the research project; to ensure that research permits have been obtained; to provide guidance to the student in applying research permits, to agree on the access and publication rights of research materials and to agree on the cooperation between partners.
- 5. To ensure that the student knows the key theoretical principles, previous findings, theories and methods in the field of research at the very beginning of the research project.
- 6. To help and support the student in the organisation of the different stages of the research project: setting the research question, carrying out the research project, interpreting and reporting the results and planning the research project further.
- 7. To ensure funding for the research project together with the student.
- 8. To monitor regularly the progress of the studies and the doctoral dissertation and to be committed to the supervising task as mutually agreed. It is important to both encourage the student and provide feedback and to address any problems that may arise.
- 9. To verify that courses provided by others than the University of Eastern Finland are suitable to the student's personal doctoral study programme (this may include courses completed elsewhere, conferences attended, etc.).
- 10. To contribute to ensuring that the research project intended to be published as a doctoral dissertation meets the requirements concerning the standard of contents and form of a scientific work by a doctoral student.

# 2.6 SUPPORT FOR STUDIES AND RESEARCH

#### **RESEARCH SERVICES**

The Research Services of the university advance and support research and development funding from outside the university. The unit offers services related to research and innovation funding and contracts to personnel and postgraduate students of the university, such as information, guidance, training and seminars.

- Funding services: information and advice on national and international funding for research and innovation, EU funding (e.g. framework funds, structural funds), grants and donations.
- Legal services: expert services in contract and intellectual property rights law.

The Research Services offer advice in acquiring funding for research and development both in Finland and abroad, making applications and project plans, and practical matters concerning projects. It also helps with matters concerning grants and donations. The unit offers legal advice in matters concerning agreements and contracts, prepares agreements and comments on agreement proposals made by cooperation partners. The university's agreement forms and models can be found on the university website.

Further information is available on the university intranet: https://www.uef.fi/intra/tip

#### ENTREPRENEURSHIP AND INNOVATION SERVICES

The Entrepreneurship and Innovation Services serve the university's researchers and students in matters related to entrepreneurship, research results applications and innovations.

Those who plan on becoming entrepreneurs and starting their own business are offered personal guidance on establishing their business, business idea evaluation, writing a business plan, and combining entrepreneurship and research. The Entrepreneurship and Innovation Services collaborate with several professionals outside the university who provide their knowledge to prospective and beginner entrepreneurs.

The Entrepreneurship and Innovation Services receive and process invention disclosures. A separate implementation plan is made for each invention together with the inventor. The unit also helps to recognise potential innovations and seek research and contracting parties. It also trains inventors on matters related to intellectual property law and turning expertise into business.

The Entrepreneurship and Innovation Services' contact person at the Joensuu campus is Business Development Advisor Irina Lavikainen, tel. +358 50 400 1539, irina.lavikainen@uef.fi and at the Kuopio campus Business Development Advisor Matti Höytö, tel. +358 40 354 5916, matti.hoyto@uef.fi

#### STUDENT AND LEARNING SERVICES

The Student and Learning Services at the University of Eastern Finland serves all students in matters related to studies, study plans, graduation and employment. The unit serves students on all three campuses in matters related to general study guidance, university registration, study rights, certificates, transcripts of academic records, study guides, the student register, and information and communications to students.

The Student and Learning Services take care of study grants, career and guidance services and international student services, for example. The staff at the unit are available to assist in all practical matters throughout your studies. They provide information and guidance across faculty and subject borders.

The opening hours of the Student and Learning Services are: Mon-Tue, Thu-Fri 10-15; closed on Wednesdays. The opening hours also apply to the phone service.

www.uef.fi/opiskelu/opintopalvelut

# LIBRARY

The Library of the University of Eastern Finland is a public scientific library. Its services, facilities and collections in the university's scientific fields are open to everyone.

The library has a wide selection of scientific publications and course books used at the university, the Open University and the Summer University, research materials, scientific magazines and theses. Nearly every Finnish book printed since 1980 in the legal deposit library is available in the reading room. The collection contains both printed and electronic books, magazines and databases for information retrieval.

The library's collection information is saved in the Josku database which can be freely accessed at http://josku.linneanet.fi/. It is possible to reserve books at other campuses from any library. Materials outside the collection can be ordered by making a distance loan from another library.

The student card can be used as a library card. There are libraries on all three campuses in Joensuu, Kuopio and Savonlinna. The university's scientific collections and services can increasingly be accessed online. Students are also granted remote access to the materials.

The library's online services and collections can be found at: http://www.uef.fi/en/web/kirjasto. Basic library services are free of charge. There are also chargeable services. The latest prices and instructions for different services are available on the library website. Information specialists and advisors can help with information retrieval problems. If required, they can give personal guidance on all information retrieval and management-related questions. They can also be commissioned to conduct information retrievals.

# 2.7 FUNDING DOCTORAL STUDIES

It is possible to receive doctoral study funding from the state study grant system, doctoral programmes, the Academy of Finland, Tekes (Finnish Funding Agency for Technology and Innovations), the Finnish Cultural Foundation (including regional funds), the university, and the grants and scholarships of various funds and foundations.

#### **FUNDS AND FOUNDATIONS**

Funds grant financial aid for, for instance, writing dissertation, covering costs of printing dissertation and arranging public defence for dissertation and journeys to meetings.

Säätiöpalvelu (Foundation Service) offers information on Finnish funds www.saatiopalvelu.fi/ (in Finnish).

The Aurora database includes funding organisations for sciences, arts and culture for both project funding and personal grants. The database includes Finnish and foreign funding opportunities, which are available for Finns or those residing in Finland. The database lists some 800 funding organisations and new funding opportunities are added on constantly to keep the database up to date. The information on Aurora is collected directly from the funding organisations.

#### STATE FINANCIAL AID FOR STUDENTS

Please note that separate requirements apply to international students seeking for state granted financial aid for students. Contact your local KELA or the University's Study Grants Advisor to find out whether you are entitled to receive study grant or not. In general, it is possible to receive study grant for doctoral studies. It is granted for fulltime studies the uninterrupted length of which is more than eight weeks. The grant is awarded for the minimum of one month and for the maximum of the number of months the studies are usually considered to take plus 10 additional months. In studies in a higher education institute, grant is usually awarded for nine months per year, but if the studies take more than nine months, the period of awarding the grant that year may be extended. The study grant for all higher education studies (Bachelor's, Master's and

doctoral level) is available for the maximum of 64 months. When determining the study grant period, only subsidised months (with study grant or adult education subsidy) used for higher education studies are counted. Study grant received for secondary school studies does not deduct the subsidised months during higher education studies, nor receiving study grant for higher education studies subtract the period of right to study grant in secondary school studies.

#### UNIVERSITY OF EASTERN FINLAND

In the University of Eastern Finland, it is possible to attend to doctoral studies while in fixed-term service as, Early Stage Researcher. Open posts and fixed-term services in the University are published, for example, on the website http://www.uef.fi/uef/avoimet-tyopaikat

The doctoral programmes have salary-paying positions for UEF doctoral students. Approximately 150 doctoral students work with this funding as early stage researchers at the university every year. The UEF doctoral student positions are salary-paying positions, enabling the doctoral students to engage in full-time study with an objective to complete the doctoral degree in four years' time.

Doctoral students completing their doctoral degree at the University of Eastern Finland are able to apply for the UEF doctoral student positions. The maximum duration of the doctoral student positions is four years. The persons selected to the UEF doctoral student positions will be hired as early stage researchers by the University of Eastern Finland.

The UEF doctoral student positions may be applied for by persons already are enrolled as doctoral students at the University of Eastern Finland and by persons planning to complete their doctoral degree at the University of Eastern Finland. Further information and calls: <a href="http://www.uef.fi/en/web/guest/research/doctoralschool/doctoral-student-positions">http://www.uef.fi/en/web/guest/research/doctoralschool/doctoral-student-positions</a>

Most of the doctoral students are working within a research projects financed e.g. by the Academy of Finland, Tekes, enterprises or EU. Enquiries concerning ongoing and forthcoming projects can be addressed directly to professors.

The Philosophical Faculty, wherever possible, budgets funds to support doctoral studies as follows:

grants for writing the doctoral dissertation

- grants for research visits and international congresses or similar trips abroad (foreign travel grant)
- dissertation publication grant

Further information: https://www.uef.fi/intra/filtdk/apurahat.

The Faculty of Health Sciences, wherever possible, budgets funds to support doctoral studies as follows:

- grants for research visits and international congresses or similar trips abroad where the student gives a presentation concerning his/her field of research or leads a workshop (compensation for travel expenses)
- grant for finalising doctoral dissertation
- dissertation printing grant

Further information: http://www.uef.fi/ttdk/apurahat1

# 2.8 RESEARCH ETHICS IN DOCTORAL STUDIES

Commitment to good scientific practice is primarily up to individual researcher, but also to supervisor, whole research team, the head of a research unit and the leadership of the University. In addition to good scientific practice each doctoral student must take into account valid legislation.

Ministry of Culture and Education has nominated The National Advisory Board on Research Ethics (Tutkimuseettinen neuvottelukunta, TENK) to address ethical questions relating to scientific research and to advance research ethics. The National Advisory Board on Research Ethics (2012) has issued research ethics guidelines 'Responsible Conduct of Research and Procedures for Handling Allegatons and Misconduct in Finland'. Each doctoral student has to be aware of good scientific practices, which can be found at the web site: http://www.tenk.fi/sites/tenk.fi/files/HTK\_ohje\_2012.pdf

Good scientific practice entails, that

- 1. The research follows the principles that are endorsed by the research community, that is, integrity, meticulousness, and accuracy in conducting research, and in recording, presenting, and evaluating the research results.
- 2. The methods applied for data acquisition as well as for research and evaluation, con-

form to scientific criteria and are ethically sustainable. When publishing the research results, the results are communicated in an open and responsible fashion that is intrinsic to the dissemination of scientific knowledge.

- 3. The researcher takes due account of the work and achievements of other researchers by respecting their work, citing their publications appropriately, and by giving their achievements the credit and weight they deserve in carrying out the researcher's own research and publishing its results.
- 4. The researcher complies with the standards set for scientific knowledge in planning and conducting the research, in reporting the research results and in recording the data obtained during the research.
- 5. The necessary research permits have been acquired and the preliminary ethical review that is required for certain fields of research has been conducted.
- 6. Before beginning the research or recruiting the researchers, all parties within the research project or team (the employer, the principal investigator, and the team members) agree on the researchers' rights, responsibilities, and obligations, principles concerning authorship, and questions concerning archiving and accessing the data. These agreements may be further specified during the course of the research.
- 7. Sources of financing, conflicts of interest or other commitments relevant to the conduct of research are announced to all members of the research project and reported when publishing the research results.
- 8. Researchers refrain from all research-related evaluation and decision-making situations, when there is reason to suspect a conflict of interest.
- 9. The research organisation adheres to good personnel and financial administration practices and takes into account the data protection legislation.

# UNIVERSITY OF EASTERN FINLAND COMMITTEE ON RESEARCH ETHICS

The University of Eastern Finland Committee on Research Ethics:

- 1) evaluates the ethics of human-targeted non-medical research projects and issues statements on them
- 2) evaluates, if needed, the ethics of other research projects if the evaluation has not been imposed on other parties by legislation
- 3) promotes research ethics training and provides guidelines related to research ethics questions at the university
- 4) works as an expert body in research-related ethical problem situations emerging at the university,
- 5) maintains research ethics discussion at the university

6) monitors and participates in the preparation of national research-related ethical guidelines and ensures its implementation at the University of Eastern Finland.

The Chair of the University of Eastern Finland Committee on Research Ethics is Professor Risto Turunen (risto.turunen@uef.fi) and its Secretary is Kaisu Kortelainen (kaisu.kortelainen@uef.fi).

The committee assesses the ethicality of research project and, if necessary, gives statements about them. Further information on how to request a statement: www.uef.fi/uef/tutkimuseettinen-toimikunta

Researchers must submit their research plan to ethical review if a study contains any of the following features:

- 1. The study involves an intervention in the physical integrity of subjects,
- 2. The study deviates from the principle of informed consent (ethical review is not required if the research is based on public documents, registries or archived data),
- 3. The subjects are children under the age of 15, and the study is not part of the normal activities of a school or an institution of early childhood education and care, and the data are collected without parental consent and without providing the parents or guardians the opportunity to prevent the child from taking part in the study,
- 4. The study exposes research subjects to exceptionally strong stimuli and evaluating possible harm requires special expertise (for example, studies containing violence or pornography),
- 5. The study may cause long-term mental harm (trauma, depression, sleeplessness) beyond the risks encountered in normal life,
- 6. The study can signify a security risk to subjects (for example, studies concerning domestic violence).

The researcher can also request a statement from the Committee on Research Ethics when

- it is required by the research topic, funder or cooperation partner
- research results are planned for publication in a scientific journal which reguires advance assessment of research ethics

# COMMITTEE ON RESEARCH ETHICS IN THE POHJOIS-SAVO HOSPITAL DISTRICT

The Committee on Research Ethics is a statutory body, appointed by the hospital district, which assesses medical research projects prior to their commencement and gives its opinion on them. Significant changes to the research plan must also be submitted for the committee's review before they take place.

The committee ensures that the research is ethical and that it takes into account the Medical Research Act and the amendments made to it, regulations on data protection and privacy, international regulations about the status of the research subjects and other regulations and guidelines concerning health sciences research. The Committee's special task is to assess whether the rights of the research subjects are respected, and whether research plans are appropriate and ethical.

The committee reviews the statements given about research which takes place at the university and the hospital but also outside the university and the Kuopio University Hospital (outpatient care, smaller hospitals with no research ethics committee).

The Committee on Research Ethics must approve the research plan before the research is allowed to begin. In addition, the research facilities must also give permission for research.

The committee's Chair is Professor Soili Lehto and the Secretary is Research Coordinator Arja Halkoaho (arja.halkoaho@kuh.fi). The committee's email address is Tutkimuseettinentoimikunta@kuh.fi. Statement requests to the Committee are sent to: Pohjois-Savon sairaanhoitopiirin kuntayhtymä, Tutkimuseettinen toimikunta, Rakennus 10 (4.krs), PL 1777, FI-70211 Kuopio, Finland. The application form and instructions are available at: http://www.psshp.fi – Tutkimus – Tutkimuseettinen toimikunta (in Finnish).

Research funders may require that a statement from the Commission on Research Ethics is attached to funding applications (e.g. the Academy of Finland).

#### ORGANISATIONS THAT TAKE PART IN ETHICAL ASSESSMENT IN FINLAND

TENK, National Advisory Board on Research Ethics

http://pro.tsv.fi/tenk/ENG/function.htm

ETENE, National Advisory Board on Health Care Ethics  $\underline{\text{http://www.etene.org/e/index.shtml}}$ 

KYTÖ, Cooperation Group for Laboratory Animal Sciences

http://wwwb.mmm.fi/koe-elaintoiminta/engl.htm

BTNK, Finnish National Advisory Board on Biotechnology

# http://www.biotekniikanneuvottelukunta.fi/english1.htm

GTLK Board for Gene Technology http://www.geenitekniikanlautakunta.fi/en

# **GUIDELINES AND REGULATIONS ON USING LABORATORY ANIMALS**

The use of laboratory animals is subject to licence. The use of animals for experimental purposes is regulated in Finland by the Act on the Use of Animals for Experimental Purposes (62/2006), the Decree on the Use of Animals for Experimental Purposes (36/2006), the Animal Welfare Act, the Animal Welfare Decree, the Animal Transport Decree and other legislation on the use of animals for experimental purposes. Further information is available from the website of the university's Laboratory Animal Centre: www.uef.fi/kek/etusivu

# 3 Completing a Doctoral Degree

# 3.1 HANDLING OF A LICENTIATE THESIS AND DOCTORAL DISSERTATION IN THE FACULTY

#### HANDLING OF LICENTIATE THESIS IN THE FACULTY

- 1. The supervisor proposes licentiate thesis examiners to the Head of Unit or to the faculty. The examiners must hold a doctoral degree. The supervisor cannot be one of the examiners.
- 2. The student submits his/her licentiate thesis to the faculty to be examined. For the examination, the postgraduate student
  - submits one to three copies of the licentiate thesis to the faculty's Administration Service Centre (Philosophical Faculty: three copies, Faculty of Science and Forestry two copies, Faculty of Health Sciences: one copy, Faculty of Social Sciences and Business Studies: three copies)
  - if the thesis consists of several publications, the student must write a clarification of his/her contribution to the publications and inform the faculty if any of the publications will be included in the licentiate thesis/doctoral dissertation of another postgraduate student.
- 3. The faculty appoints two examiners to the licentiate thesis.
- 4. The faculty (in the Faculty of Health Sciences the postgraduate student) sends the licentiate thesis to the examiners.
- 5. The examiners appointed by the faculty must give their statements within two (2) months after receiving the licentiate thesis.

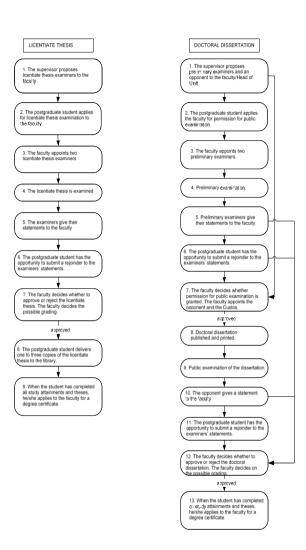
- 6. The student makes any corrections demanded by the examiners to his/her licentiate thesis. The student has the opportunity to submit a rejoinder to the examiners' statements.
- 7. The faculty approves or rejects the licentiate thesis and notifies the postgraduate student of the decision and the possible grade on the basis of the examiners' statements and the student's rejoinder.
- 8. Immediately after the licentiate thesis has been approved, the student submits one to three bound copies of it to the university library (one archive copy and possible copies for the unit and for public loans).
- 9. After completing the studies and theses required for the licentiate degree, the student applies to the faculty for a licentiate degree certificate with a certificate application form. The forms are available on the faculties' doctoral education websites.

#### HANDLING OF DOCTORAL DISSERTATIONS IN THE FACULTY

- 1. The supervisor makes a proposition to the unit head or to the faculty about the doctoral dissertation examiners and its opponent. Supervisors and members of the same research group cannot become examiners/opponents. The examiners must hold a doctoral degree. The opponent must come from outside the University of Eastern Finland and be at least a docent or hold a corresponding scientific qualification. Faculty of Science and forestry has specified the qualification of examiners (http://www.uef.fi/lumet/ohjeita-jatko-opiskelijoille).
- 2. The doctoral candidate applies to the faculty for permission for public examination through the use of a form available on the faculties' doctoral education websites, in which the person in charge of the subject proposes preliminary examiners for the dissertation. In addition, the doctoral candidate
  - submits the doctoral dissertation to the faculty's Administration Service Centre (Philosophical Faculty: three copies, Faculty of Science and Forestry two copies, Faculty of Health Sciences: one copy, Faculty of Social Sciences and Business Studies: three copies)
  - if the dissertation consists of several publications, the doctoral student must write a clarification of his/her contribution to the publications and inform the faculty if any of the publications will be included in the licentiate thesis/doctoral dissertation of another student.

- 3. The faculty appoints two examiners to the doctoral dissertation.
- 4. The faculty (in the Faculty of Health Sciences the doctoral student) sends the doctoral dissertation to the examiners.
- 5. The examiners appointed by the faculty must give their statements within two (2) months after receiving the doctoral dissertation.
- 6. The doctoral student makes any corrections demanded by the examiners to his/her doctoral dissertation. The student has the opportunity to submit a rejoinder to the examiners' statements.
- 7. The faculty decides on giving the doctoral candidate permission for public examination on the basis on the preliminary examiner's statements and the candidate's possible rejoinder. The faculty appoints one or several opponents for the dissertation's public examination and appoints a Custos, the chairman of the public examination. The chairman must be a professor or a docent at the University of Eastern Finland. The doctoral student will be heard before the opponent is decisively appointed.
- 8. The doctoral candidate sees to the publication of the doctoral dissertation as well as its possible printing. The candidate delivers a printed copy to the library on his/her campus ten days before the public examination.
- 9. Public examination of the dissertation. The doctoral candidate deals with the practical arrangements of the public examination (detailed instructions in Section 3.4.1):
  - The doctoral candidate sets a date and books a venue for the public examination together with the opponent, the Custos and the main supervisor at least three weeks before the public examination takes place. The doctoral candidate announces the time and venue and delivers the dissertation to the Faculty Dean and the Rector of the university.
  - The doctoral candidate sends the details of the public examination to the university's Communications and Media Relations Office at least two weeks before the public examination takes place (detailed instructions in Section 3.4.1 Preparing for the public examination of the dissertation).
- 10. The opponent gives the faculty a written statement about the dissertation within two weeks following the public examination.

- 11. The student has the opportunity to submit a rejoinder to the opponent's statement.
- 12. The faculty approves or rejects the doctoral dissertation and decides the possible grade on the basis of the statements given by the opponent(s) (and the preliminary examiners) and the postgraduate candidate's possible rejoinder. The student is notified when the doctoral dissertation has been approved.
- 13. After completing the studies and theses required for the doctoral degree, the student applies to the faculty for a doctoral degree certificate with a certificate application form. Detailed instructions are available on the faculties' doctoral education websites.



# 3.2 EVALUATION OF A LICENTIATE THESIS AND DOCTORAL DISSERTATION

# 3.2.1 Philosophical Faculty

### LICENTIATE THESIS

Licentiate theses are graded by the Faculty Council. According to the Faculty Council delegation decision (20 January 2010), the Dean appoints, on the basis of the proposal made by the Head of School, at least two examiners to grade the licentiate thesis. The thesis supervisor cannot be an examiner. A person cannot be appointed as an examiner if he/she has written publications or participated in research projects with the doctoral student during the student's doctoral studies or if he/she is otherwise disqualified.

The examiners must give a written statement which includes a proposed grade. The doctoral student has the right to submit a rejoinder to the examiners' statement. After the licentiate thesis has been approved, it will be graded either pass or pass with distinction. Before the licentiate thesis is graded, the doctoral student has the opportunity to write a rejoinder to the examiners' statements.

The grade pass with distinction can be awarded if the thesis has several significant merits without deficiencies that would nullify them. A public examination can be arranged to grade the licentiate thesis. The doctoral programme for which the thesis was written is responsible for organising the examination. If a public examination is held, the examiners give their statements after it has taken place.

#### DOCTORAL DISSERTATION

According to the Faculty Council delegation decision (20 January 2010), the Dean appoints, on the basis of the proposal made by the Head of School, at least two examiners to the dissertation manuscript. They are chosen, if possible, from outside the student's faculty. The supervisor cannot be one of the examiners. Furthermore, a person cannot be appointed as an examiner if he/she has written publications or participated in research projects with the postgraduate student during the student's doctoral studies or if he/she is otherwise disqualified.

The doctoral dissertation is graded by the Faculty Council after the public examination. According to the Faculty Council delegation decision (20 January 2010), the Dean appoints, on the basis of the proposal made by the Head of School, one or two opponents, a chairman of the public examination (a Custos), and a faculty representative to grade

the dissertation. A person cannot be appointed as an opponent if he/she has written publications or participated in research projects with the postgraduate student during the student's postgraduate studies or if he/she is otherwise disqualified. The faculty representative must hold at least a doctoral degree in the same or related subject. The representative familiarises him/herself with the dissertation and observes the public examination. After the public examination, the Custos, the opponent(s) and the faculty representative hold a meeting to discuss grading. The Custos then writes a statement about the proceedings of the public examination. After the public examination, both the opponent(s) and the faculty representative write a statement about the dissertation and the public examination.

In their statements, the opponent(s) and the faculty representative propose one of the following grades to the approved dissertation: approbatur, lubenter approbatur, non sine laude approbatur, cum laude approbatur, magna cum laude approbatur, eximia cum laude approbatur or laudatur. Before the dissertation is graded, the postgraduate student must be reserved the opportunity to write a rejoinder to the statements. The faculty council will grade the dissertation on the basis of these statements.

In grading a doctoral dissertation, the following points in particular must be taken into account:

# (1) The topic and research problem of the research project and narrowing the research problem

The topic has significant information value and generates new information in the field of research or opens a new line of research. The research tasks and questions have been appropriately narrowed down. The research project has a meaningful connection to earlier research.

# (2) Conceptual clarity

The concepts used in the research project are clear and justified. They have been analysed and assessed critically and extensively with the help of high-quality scientific literature.

# (3) Research methodology and methods

The research project is methodologically justified. The researcher demonstrates his/her knowledge of earlier theoretical and methodological discussion. The methods employed in the research project are described and their choice is explained. The researcher

demonstrates that the methods can be used to solve the research problems which have been set.

# (4) Material

The material used in the research project is of high quality. It is relevant and sufficient in light of the research topic.

# (5) Reporting the results and conclusions

In light of the research tasks, the results have been reported in a logical way from multiple viewpoints. The significance of the results to the field has been assessed in a relevant manner. The research report lists the most important questions for future research. The social and international significance of the research project is assessed.

# (6) The dissertation in general and its presentation

The research project is a logical entity both in terms of structure and argumentation, and the language is clear and readable. The text focuses on essential questions. The research project has been completed independently and it demonstrates independent critical thinking towards earlier research, research methods and research concepts.

In the Philosophical Faculty, the following grades may be awarded to a dissertation. A requirement for all grades is that the study conducted must comply with good research ethics in all respects.

#### Laudatur

The dissertation has an ambitious topic and, in light of the criteria above, its merits are exceptional.

# Eximia cum laude approbatur

The dissertation has several significant merits in light of the evaluation criteria above without deficiencies which would nullify them.

# Magna cum laude approbatur

The dissertation has significant merits in light of the evaluation criteria above without deficiencies which would nullify them.

# Cum laude approbatur

The dissertation meets the evaluation criteria above. The merits of the research may compensate for deficiencies in meeting some of the above-mentioned criteria.

# Non sine laude approbatur

The dissertation meets the faculty's specifications for a doctoral dissertation. The research is mostly well conducted, but the dissertation has deficiencies in meeting the above-mentioned criteria with no merits which would significantly compensate for them

# Lubenter approbatur

The dissertation meets the faculty's specifications for a doctoral dissertation, but it has several significant deficiencies in meeting the above-mentioned criteria with no merits which would sufficiently compensate for them.

# **Approbatur**

The dissertation meets sufficiently the faculty's specifications for a doctoral dissertation, but it has several serious deficiencies.

# 3.2.2 Faculty of Science and Forestry

Licentiate theses and doctoral dissertations are graded on the following scale: pass with distinction – pass – fail. The grade pass with distinction requires that the preliminary examiners of the dissertation are consulted on the proposal and they recommend this grade to be awarded.

# 3.2.3 Faculty of Health Sciences

Licentiate theses are graded pass - fail.

Doctoral dissertations are graded on the following scale: pass with distinction – pass – fail. The grade pass with distinction must be proposed by at least two of the evaluators (an opponent and preliminary examiners). Dissertation evaluation instructions for preliminary examiners and opponents are available at http://www.uef.fi/ttdk/ohjeet-jalomakkeet2.

# 3.2.4 Faculty of Social Sciences and Business Studies

The most important evaluation criteria for licentiate theses and doctoral dissertations are the scientific significance of the results and the student's personal research contribution. In addition, the evaluation criteria include the following points:

#### Basis of the research

- the scientific level, formulation and justification of the research problem
- the theoretical basis of the research and its linkage to earlier research
- the scientific and practical relevance of the research topic

# Research process

- the student's command of the field of research and knowledge and use of literature
- command, definition and clarity of concepts
- the success of choices made during the research process, the possibility to assess these choices
- the level of challenge, innovativeness and uniqueness of the research
- the suitability and command of the methods used
- the quality and precision of the work

# Research results and the way they are reported

- new knowledge and results generated by the research
- sufficiency of the doctoral candidate's contribution to the research
- consistency in linking the research results to the material used
- relevance of the research results to the field of research in question
- in article-based dissertations, the quality and publication forums of the arti-
- the research's logical presentation, style and linguistic form
- public examination of the dissertation

# Evaluation criteria concerning only the doctoral dissertations:

- in article-based dissertations, the quality and publication forums of the arti-
- public examination of the dissertation

Furthermore, attention is paid to whether the research and the way its results are documented take good scientific and ethical practice into account.

Licentiate theses and doctoral dissertations are graded on the following scale:

Scientific Field	Grading
Geography and social geography, law, social sciences	Licentiate thesis / Doctoral dissertation: laudatur – eximia cum laude approbatur – magna cum laude approbatur – cum laude approbatur – non sine laude approbatur – lubenter approbatur – approbatur – improbatur  Professional licentiate degree in social work: pass with distinction – pass – fail
History	Licentiate thesis / Doctoral dissertation: laudatur – eximia cum laude approbatur – magna cum laude approbatur – cum laude approbatur – non sine laude approbatur – lubenter approbatur – approbatur – improbatur
Business studies, health sciences	Licentiate thesis / Doctoral dissertation: pass with distinction – pass – fail

# 3.3 PUBLISHING THE DISSERTATION

After the faculty has given the doctoral candidate permission for public examination, the doctoral dissertation can be published. The dissertation must be published at least ten days before the public examination. The doctoral candidate must make sure that the dissertation is available at the university library in time. If the dissertation has only been published in an electronic format, a paper copy must be taken to the library for the public to view.

A doctoral dissertation can be published in printed or electronic format or both. Printing is not obligatory. The University of Eastern Finland and many research institutes have publication series which publish doctoral dissertation.

The following dissertation series of UEF's publication series publish dissertations:

- Publications of the University of Eastern Finland. Dissertations in Education, Humanities, and Theology.
- Publications of the University of Eastern Finland. Dissertations in Forestry and Natural Sciences.
- Publications of the University of Eastern Finland. Dissertations in Health Sciences.
- Publications of the University of Eastern Finland. Dissertations in Social Sciences and Business (have to publish both in paper and electronic form)

Doctoral dissertation publication process in one of the university's publication series:

- 1. After the faculty has given the doctoral candidate permission for public examination, the doctoral dissertation can be published.
- 2. As the author, the doctoral student is responsible for acquiring copyrights and publication rights for the articles and other materials in the dissertation. An article-based dissertation is published in full only if the original article publishers have given their written consent to republish the articles in the university's publication series. The permission for reprinting must be announced on a separate page at the beginning of each article, in the table of contents and after other possible indexes. E.g. 'Printed with the kind permission of [publisher's name]'
- 3. The doctoral student applies for publication permission from the publication series' editor. After receiving the publication permission, the student signs a publication contract with the editor-in-chief. The publication permission form is available on the communications page of the university's intranet: https://www.uef.fi/intra/viestinta/julkaisusarjat

The responsible editors for the publication series are:

- Philosophical Faculty: Professor Päivi Atjonen (School of Educational Sciences and Psychology), Professor Ulla Härkönen (School of Applied Educational Sceince and Teacher Education), Professor Matti Kotiranta (School of Theology) and Professor Maija Könönen (School of Humanities)
- Faculty of Science and Forestry: Professor Pertti Pasanen (Environmental Science), vice editors: Professor Pekka Toivanen (Computer Sci), Professor Jukka Tuomela (Physics and Mathematics) and Professor Matti Vornanen (Biology).
- Faculty of Health Sciences: Professor Tomi Laitinen, vice editors: Professor Hannele Turunen and Associate Professor Tarja Malm, Professor Kai Kaarniranta, University Lecturer Veli-Pekka Ranta.
- Faculty of Social Sciences and Business Studies: Professor Kimmo Katajala, information officer Eija Fabritius

4. The doctoral student is responsible for preparing the dissertation for publication, including its layout. The editor-in-chief decides on the layout of the text. Technical writing instructions are available in the university's publication guide: https://www.uef.fi/intra/viestinta/julkaisusarjat

The doctoral student also takes care of the layout in practice. A layout template and dissertation cover models are available from the Communications and Media Relations Office's intranet site. It is recommended to use the layout template from the beginning of the dissertation writing process. https://www.uef.fi/intra/viestinta/julkaisusarjat

See layout and publication instructions of the Faculty of Philosophy: http://www.uef.fi/filtdk/vaitoskirjan-julkaisuohjeet

See layout and publication instructions of the Faculty of Health Sciences: http://www.uef.fi/ttdk/ohjeet-ja-lomakkeet25. The editor requests an ISBN code for the dissertation from by using the web-formula that can be found from: http://elomake.joensuu.fi/lomakkeet/3205/lomake.html

- 6. The doctoral student writes a content description for the dissertation together with the library, either by email or through a personal appointment with an informatician (further information from the library customer service points).
- 7. The doctoral student manages the printing of the dissertation.
- 8. The doctoral student, the editor and a person appointed by the library check the proof version. A proof must always be printed before the thesis is published. The editor-in-chief gives printing permission.
- 9. The doctoral student sees to the printing and distribution of the dissertation. The print run contains: exchange copies, copies for the library collections, free copies, copies distributed to the university community, an archive copy and copies for sale. The custom has been to send the dissertation to the Rector of the student's home campus, the Dean of the Faculty and the Professor of the student's subject. Copies of the dissertation are sent to the opponent and the Custos well before the public examination. The library will forward the exchange copies funded by the university to its exchange partners and incorporates them into its collections. The library is also responsible for selling the dissertation and determines the price.

The print runs for the publication series are the following: the Philosophical Faculty at least 60 copies, the Faculty of Science and Forestry at least 40 copies, the Faculty of Health Sciences at least 50 copies, the Faculty of Social Sciences and Business Studies at least 120.

- 10. The doctoral student also signs an electronic publication contract with the library. All dissertations in the university's publication series are also published electronically. The electronic publication contract form and publication instructions are available from the library website: http://epublications.uef.fi/julkaisijalle/
- 11. The doctoral student must take the dissertation to the library of his/her home campus at least ten days before the public examination.

1. The postgraduate student is granted public examination permission by the faculty. 2. The student requests possible publication rights for the articles. 3. The student applies the editor-in-chief of the publication series for publication permission. A publication agreement is made. 4. The postgraduate student prepares the dissertation for publication, including layout. 5. The editor-in-chief requests an ISBN code from the library. 6. The student and the library take care of the dissertation's content description 7. The postgraduate student has the dissertation printed. 8. Proofreading the proof version. 9. Printing and distributing the dissertation.

11. The student delivers the dissertation to the library at least ten days before the public examination

 The student and the library make an electronic publishing contract.

# 3.4 PUBLIC EXAMINATION OF THE DISSERTATION

Each doctoral dissertation is examined in a public examination ceremony. The ceremony is also a visible, formal occasion for publishing the research results. The public examination usually takes place within one or two months after the faculty has given permission for the public examination. This ensures that there is enough time to print the dissertation and announce the public examination.

Dissertations must be defended in public. The public defence has three roles:

- 1. it offers the opportunity to ensure, publicly and on the most reliable way, to that the doctoral candidate has written the dissertation him/herself, and that the dissertation meets the standard generally set to dissertations
- 2. it offers to the official first examiners and others interested in its topic a possibility to thoroughly learn about the contents of the dissertation by listening, making questions and comments and discussing with the author
- 3. it offers an opportunity to make known research results produced in a way that slightly differs from the everyday work in the university and is more outstanding.

# 3.4.1 Preparations for the Public Examination of the Dissertation

The list of things to do before the public examination for the doctoral candidate:

- set and book the date and venue for public examination
- take care of the possible printing of the dissertation
- deliver the dissertation for public display to the library at least ten days before the public examination
- present the dissertation to the pre-examiners, the departments and dean of the relevant faculty, and the rector
- deliver the details and notice of the public examination to Communications and Media Relations Office
- set the date for photography
- agree on the catering for the public examination

# SETTING THE DATE AND TIME FOR PUBLIC EXAMINATION

The doctoral candidate sets a date and time for the public examination together with the opponent, the Custos and the main supervisor at least three weeks before the public examination takes place. The doctoral candidate announces the public examination with the help of the university's Communications and Media Relations Office. The doctoral

candidate books the venue for the public examination through the university venue reservation service.

# ANNOUNCING THE PUBLIC EXAMINATION

The University's Communications and Media Relations Office delivers a press release of each doctoral dissertation to the media. The press releases are also published on the university website. Public examinations are also announced in the university calendar. The press releases aim to make the university's research more accessible to journalists and the general public.

To make sure that the public examination is announced effectively, the doctoral candidate must do the following at least two weeks before the exam takes place:

- complete an online dissertation form (http://wanda.uef.fi/vaitokset/uef\_vaitos.html),
- deliver text for the press release to the Communications and Media Relations
   Unit using the address vaitos(at)uef.fi
- have his/her public examination photograph taken

The press release is usually delivered the week before the dissertation; this is also announced to the doctoral candidate. The media may use the press release as such when writing news, or they can contact the doctoral candidate to conduct an interview. For this reason, the press release includes the doctoral candidate's contact information. After the press release has been published, the doctoral candidate must be reachable by the media, because if the media finds a dissertation interesting, it is usually reported on before the public examination takes place.

The media independently decides whether a public examination is reported on or not. Whether it becomes news is affected by many things such as the number of public examinations, general interest in the topic, the news of the day and the doctoral candidate's home region. The media cannot be made to publish any information about the public examination.

The faculties' Communications Officers handle press releases:

- Philosophical Faculty: Communications Officer Nina Venhe, nina.venhe@uef.fi, +358 50 593 0160
- Faculty of Science and Forestry: Communications Officer Marianne Mustonen, Marianne.mustonen@uef.fi, +358 29 445 8237
- Faculty of Health Sciences: Communications Officer Ulla Kaltiala, ulla.kaltiala@uef.fi, +358 40 745 6463
- Faculty of Social Sciences and Business Studies: Communications Officer Sari Eskelinen, sari.eskelinen@uef.fi, 013 251 2077.

#### PUBLIC EXAMINATION PHOTOGRAPHS

A photograph of the doctoral candidate is usually delivered to the media with the press release. Because of this, the doctoral student should have his/her picture taken by the Communications and Media Relations photographer at least two weeks before the public examination. The photography appointment is made directly with the photographer.

Photography at the university is free of charge, and the photographer takes care of forwarding the pictures. It is recommended that the candidate wear dark clothes in the picture (this allows for the picture to be used for example in the register for the conferment of degrees).

- In Joensuu, the photographs are taken by Varpu Heiskanen, tel. +358 13 251 3314, varpu.heiskanen(at)uef.fi
- In Kuopio, the photographs are taken by Raija Törrönen, tel. +358 40 355 3294, raija.torronen(at)uef.fi

If the student is unable to have a picture taken, he/she can send a paper photograph which will be scanned by the photographer. However, the quality of personal digital photos or small passport photos is rarely good enough for printing.

# 3.4.2 Progress of the Public Examination

The public examination begins 15 minutes past the hour, by which time the audience will have arrived in the room. The doctoral candidate is the first to enter the room, followed by the custos and finally the opponent. The audience will stand up when they enter the room

The public examination includes the following sections:

- opening of the public examination
- the candidate's introductory lecture, lectio praecursoria
- the opponent's opening statement
- public examination of the doctoral dissertation
- the opponent's final statement
- the candidate's concluding words
- closing of the public examination.

#### OPENING OF THE PUBLIC EXAMINATION

When everyone has taken their seats (the candidate on the left of the custos), the custos will open the public examination by saying: "As the custos appointed by the Faculty of xx of the University of Eastern Finland, I declare this public examination open." After this, the custos and the opponent get seated.

# THE CANDIDATE'S INTRODUCTORY LECTURE, LECTIO PRAECURSORIA

After the public examination has been opened, the candidate stands up to give a short introductory lecture, lectio praecursoria, in which he or she introduces the background of the dissertation and its connections to scientific or practical problems. The lectio praecursoria may not last more than 20 minutes. The candidate should begin the introductory lecture with the following words: "Mr/Madam custos, Mr/Madam opponent, ladies and gentlemen." The introductory lecture is usually given in the language of the dissertation. After the introductory lecture, the candidate says: "I now call upon you, Mr/Madam opponent/Professor/Adjunct Professor/Dr NN as the opponent appointed by the Faculty of xx to present your critical comments on my doctoral dissertation."

# THE OPPONENT'S OPENING STATEMENT

The opponent stands up to give his or her opening statement on the dissertation under examination. The opponent then concludes the opening statement and begins to examine the dissertation in detail. After the opponent has given the opening statement, the opponent and the candidate sit down. If there is more than one opponent, the opponents will have to agree on a division of tasks and announce this in their opening statement.

# PUBLIC EXAMINATION OF THE DOCTORAL DISSERTATION

In the actual examination of the dissertation, the opponent first makes a general overview by discussing the choice of the topic, methods and data, and then moves on to a

more detailed examination. At the end of the examination, the opponent makes a summary of the results of the dissertation to the discipline in question. The opponent may use approximately four hours for the examination so as to leave time for possible questions from the audience. If the examination seems to take long, the custos may announce a break.

#### THE OPPONENT'S FINAL STATEMENT

After having examined the dissertation, the opponent stands up to deliver the final statement. The candidate also stands up to listen. The opponent then takes his or her seat.

#### THE CANDIDATE'S CONCLUDING WORDS

The candidate thanks the opponent and then faces the audience and says: "If anyone present wishes to make any comments concerning my dissertation, please ask the custos for the floor "

#### CONCLUSION OF THE PUBLIC EXAMINATION

Finally, the custos stands up to announce that the public examination is completed. The public examination of a dissertation may not last more than six hours.

The custos and opponent hold their doctoral hats in their hand when they leave the room in the same order as they entered: first the candidate, followed by the custos and finally the opponent. The audience should not applaud or cheer during the public examination. Congratulations should be extended to the candidate only after he or she has left the room and has had the opportunity to thank the opponent and the custos.

# 3.4.3 Post-doctoral Party, väitöskaronkka

The post-doctoral party, karonkka, taking place in the evening of the public examination is an old academic tradition. The post-doctoral party is held in the honour of the opponent and the candidate acts as the host or hostess of the party.

# INVITATIONS TO THE POST-DOCTORAL PARTY

Traditionally, invitations to the post-doctoral party were not sent before the opponent had given his or her statement on recommending the approval of the doctoral dissertation. Nowadays, however, invitations to the post-doctoral party are sent in advance. It is customary for the candidate to contact the opponent before the public examination and ask whether he or she can start the party arrangements.

An invitation to the post-doctoral party should be sent, not only to the opponent and the custos, but also to the supervisor, pre-examiners and proof reader of the dissertation, as well as to anyone else who has clearly contributed to the dissertation. Also the candidate's companion, parents and close friends should be included in the guest list. However, the post-doctoral party is not a family party.

It is also customary to invite the persons from the audience who asked questions or made comments at the public examination to the post-doctoral party but, according to an unwritten rule, they are not to accept the invitation.

The doctoral candidate may formulate the wording of the invitation, but it should indicate the dress code, especially if the doctoral candidate prefers the guests not to wear tailcoats and evening dresses, or wishes to suggest alternative styles of dress.

#### DRESS CODE

In the post-doctoral party, men traditionally wear a tailcoat and women wear an evening dress. Men should also wear white waistcoat, unless the guests are exclusively male, in which case the waistcoat should be black. Female candidates, as well as female guests arriving with a partner in tailcoat, should wear a long evening dress, either black or other dark colour. Instead of a tailcoat, men may wear a dark suit, in which case the female partner should wear a short, formal dress. The post-doctoral party in general is a festive occasion and everyone should dress accordingly, i.e. not too casually.

#### **SEATING**

The doctoral candidate is the host or hostess of the evening and the opponent is the guest of honour. The guest of honour sits on the candidate's right. The custos, on the other hand, sits on the candidate's left. If there are two opponents, the younger will sit on the candidate's left and the custos on the next place to the left. Other guests are usually seated in the order of their academic achievement.

#### **PROGRAMME**

The doctoral candidate offers food, drinks and possibly also some other entertainment as well. The candidate welcomes everyone to the party, after which the dinner will be served.

Speeches should not be given until after the dinner and before the coffee. The candidate should begin the speeches by fist thanking the opponent and then the custos. After this, the candidate should also thank everyone else who have contributed to the dissertation,

in the order of importance. Finally, the candidate thanks his or her partner or, in the absence of a partner, someone else really close to the candidate. The speeches of thanks given by the candidate should be rather short and they should be given without notes.

The opponent will immediately reply to the candidate's speech. The opponent's response is usually light and informal, not too festive or serious. Should the custos like to say a few words, he or she can do so after the opponent has finished. After this the guests may say a few words in the order they were mentioned in the candidate's speech.

After the speeches, the party takes a more informal turn and the guests can enjoy the music, each others' company, etc.

# 3.5 APPLYING FOR THE DEGREE CERTIFICATE

After completing all courses and theses included in the degree, the student applies to the faculty for a degree certificate. The application is made by completing a form which is available on the website of the faculty in question:

Philosophical Faculty: <a href="http://www.uef.fi/filtdk/jatkotutkinnon-haku">http://www.uef.fi/filtdk/jatkotutkinnon-haku</a>

Faculty of Science and Forestry: www.uef.fi/lumet/lomakkeet

Faculty of Health Sciences: www.uef.fi/ttdk/ohjeet-ja-lomakkeet2

Faculty of Social Sciences and Business Studies: www.uef.fi/yhka/lomakkeet

Before applying for a certificate, the doctoral student must ensure that all study attainments have been entered into the register. The student must also make sure that the titles of courses and study modules completed in other universities have been translated into English. Titles in English are required when a transcript of academic records is printed in English.