

Call for Applications for Doctoral Researcher Positions at the University of Turku Graduate School, Doctoral Programme in Technology (DPT)

Short description of the doctoral programme

The Doctoral Programme in Technology (DPT) operates in the disciplines of natural sciences (biosciences, computer sciences, and industrial engineering and management), technology (automation and electrical engineering, biotechnology, information and communication technology, materials engineering, mechanical engineering, and industrial engineering and management), and humanities (phonetics). A Doctor of Philosophy (PhD) degree can be completed in following major subjects: biochemistry, food chemistry, industrial engineering and management, molecular biotechnology and diagnostics, molecular plant biology, phonetics, or computer science. A Doctor of Science in Technology (DSc (Tech)) degree can be completed in following major subjects: automation and electrical engineering, biotechnology, food development, sustainable biotechnological processes, information and communication technology, materials engineering, mechanical engineering, or industrial engineering and management. A degree of Doctor of Philosophy (PhD) or Doctor of Science in Economics and Business Administration (DSc (Econ & Bus Admin)) can be completed in the major subject of information systems science. More detailed description of the doctoral programme can be found at www.utu.fi/dpt.

Application period and what can be applied for

During the application period 28 August – 13 September 2024, you can apply for:

a) The right to pursue a doctoral degree at the University of Turku at the Faculty of Technology or at the Turku School of Economics (Information Systems Science as field of research) at the Doctoral Programme in Technology from 1 January 2025 onwards.

b) A fixed term Doctoral Researcher position under an employment contract

The position of a Doctoral Researcher is set to begin on 1 January 2025 at the earliest and can last until 31 December 2028. The DPT programme uses a matching funding model, in which University of Turku Graduate School (UTUGS) funding is granted for a maximum of 24 months per doctoral researcher.

The positions are intended for full-time doctoral dissertation research. Duties other than those related to doctoral dissertation research, such as teaching duties, must be proportioned so as not to compromise the completion of the doctoral dissertation within the planned schedule. As a rule, up to 5% (a maximum of about 80 hrs per academic year) of the annual working time of the Doctoral Researcher can consist of teaching.

When determining the length of the employment contract, prior funding granted for pursuing a doctoral degree, planned schedule and current phase of the research are taken into account. The maximum length for a Doctoral Researcher position is two years in the DPT doctoral programme. A person already awarded with a doctoral degree cannot be chosen as a Doctoral Researcher under an employment contract.

The Doctoral Researcher works at the Department of Computing, Department of Life Technologies, Department of Management and Entrepreneurship, Department of Mechanical and Materials Engineering or in Turku Bioscience Centre.

A doctoral researcher position requires residence in Finland.





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The salary is based on the salary system of the university's teaching and research staff. It consists of a task-specific salary component and a personal performance salary component. The task-specific salary component of a doctoral researcher is at level 2–4, depending the progress of the doctoral project. The personal performance component, added on top of the task-specific base salary is also paid. For a doctoral researcher, the salary will be commensurate with qualifications and experience and will be approximately 2400–3300 €/month, depending on the progress of the doctoral project. The position has a probationary period of six months.

c) Both of the above (a and b)

Doctoral researchers in the fields of immunology, immunology-based drug development and/or diagnostics have the opportunity to apply for and carry out a part of their doctoral studies in the InFLAMES Doctoral Module. See: https://www.utu.fi/en/yliopisto/tutkimus/inflames/inflames-tohtorimoduuli.

What is expected of you

When applying for a right to study:

- You are required to have completed a relevant Master's degree awarded by a university or a university of applied sciences, or a relevant study programme abroad which in the awarding country gives eligibility for the corresponding level of higher education (Universities Act 558/2009, 37§). At the Faculty of Technology, the degree which grants the applicant the eligibility for the study right for a doctoral degree must be completed within the application period, or after the application deadline on the condition that the applicant graduates and submits a scanned degree certificate and a transcript of study records to the University of Turku email tech-doc@utu.fi by 15 November 2024. When applying for Information Systems Science at the Turku School of Economics, the degree that gives eligibility for the study right for a doctoral degree must be completed at the latest on 13 September 2024.
- You must fulfil the University of Turku language skill requirements.
- You are required to fulfil the prerequisites set by the Faculty of Technology, or the Turku School of Economics for granting a right to study. For more information, see the section "Admission criteria for the right to study a doctoral degree".

When applying for a fixed-term Doctoral Researcher position under an employment contract:

- You are required to have an active right to study in the DPT doctoral programme. In addition, you must demonstrate the ability to undertake doctoral studies and complete a doctoral degree in accordance with the research plan (University of Turku Rules of Procedure 16.1.2022). If you have not yet been granted a right to study, you must apply for a right to pursue a doctoral degree in the DPT doctoral programme by filling in an electronic form in My Studyinfo service (for details, please, see section "How to apply the right to study for a doctoral degree"). A right to study is a prerequisite for an applicant to be chosen for a fixed-term doctoral researcher position under an employment contract;
- You are planning to pursue or pursuing your first doctoral degree;
- You have not previously been granted a full-time four-year funding for pursuing a doctoral degree.





How to apply

Please note, that when applying for both the right to study and a fixed-term doctoral researcher position, you will need to fill in the application with the required attachments to the separate online systems (see more information below). The right to study for a doctoral degree is applied for by filling in an electronic form in the My Studyinfo service and the fixed-term doctoral researcher positions are applied for by filling in an electronic form in the University of Turku recruitment system (TalentAdore). For both applications you will need to attach the required additional documents (in pdf form). Application documents are specified at the end of this call for applications (Appendix 1 & Appendix 2). It is recommended that application documents are written in English.

How to apply the right to study for a doctoral degree:

The right to study for a doctoral degree is applied for by filling in an electronic form in My Studyinfo service and attaching the required additional documents specified in Appendix 1. The form will be accessible as the application period begins on 28 August 2024 and closes at 4 pm (local time in Finland) on 13 September 2024. Link to the University of Turku Graduate School web page, where the application form can be found.

During one application round the applicant may apply to a maximum of two doctoral programmes at the University of Turku. You can only have one valid study right at a time for a doctoral degree at the University of Turku.

Applications that arrive after the application period has ended will not be processed. When the application period has ended, you cannot change the doctoral programme you are applying for, or any other information.

In My Studyinfo service, you can only apply for right to study a doctoral degree. If you also want to apply for a fixed-term doctoral researcher position under an employment contract, you must apply for that position separately (for details, please, see section "How to apply the fixed-term doctoral researcher position under an employment contract").

How to apply the fixed-term doctoral researcher position under an employment contract

The fixed-term doctoral researcher position under an employment contract is applied for by filling in an electronic form in the University of Turku recruitment system (TalentAdore) and attaching the required additional documents specified in Appendix 2. The form will be accessible as the application period begins on 28 August 2024 and closes at 4 pm (local time in Finland) on 13 September 2024.

The positions are announced at the beginning of the application period in the Open Vacancies at the University of Turku website and on the website of the Graduate School. <u>Link to the University of Turku Graduate School web page</u>, <u>where the application form can be found</u>. Applications that arrive after the application period has ended will not be processed. When the application period has ended, you cannot change the doctoral programme you are applying for, or any other information.

A person selected for the position is required to have an active right to study in the DPT doctoral programme. If you have not yet been granted a right to study, you must apply for a right to pursue a doctoral degree in the DPT doctoral programme by filling in an electronic form in My Studyinfo service (for details, please, see section "How to apply the right to study for a doctoral degree").





Evaluation of applications

Applications are reviewed by the steering committee of the doctoral programme. Applications may also be sent for evaluation to national and/or international reviewers. Shortlisted applicants for the fixed-term doctoral researcher position may be interviewed.

Admission criteria for the right to study a doctoral degree

In addition to the eligibility criteria related to the right to pursue a doctoral degree (Universities Act 558/2009, 37§) and the required language skills, also the educational and research-related merits, the quality of the research plan and its feasibility in the planned schedule, and the research potential based on the application documents are used in the evaluation and selection of doctoral researchers. In the selection process e.g. applicant's motivation, merits and completed studies will be taken into account. The admitted applicants must have a good knowledge of the English language. The research topic of the doctoral researcher must fit the profile of the doctoral programme.

In the Faculty of Technology, new doctoral researchers have to agree on the supervision arrangements (research director, at least two qualified supervisor) with the department in question before submitting the application (Supervision plan form). According to the Rector's decision each doctoral researcher must have at least two supervisors. One supervisor acts as the main supervisor. The faculty may appoint only one supervisor for a doctoral researcher based on application and for a valid reason. A supervisor must have completed a doctoral degree, and at least one of a doctoral researcher's supervisors must be a professor (professor, associate professor or assistant professor) or an adjunct professor. In the Faculty of Technology, one of the doctoral researcher's supervisors has to be employed by the University of Turku or be docent (adjunct professor) of the University of Turku.

If the applicant does not submit a signed supervision plan that meets the faculty supervisor requirements as an attachment of the application, the application will be rejected.

At the Faculty of Technology, in order to be accepted as a doctoral researcher, applicants are required to have been successful in their prior studies. If the field of the Master's degree (or equivalent) differs from the field of research of postgraduate studies or there are other shortcomings in prior studies, knowledge and skills may be required to be supplemented to achieve a sufficient level. The appointed research director of a postgraduate student gives a statement in the supervision plan on the possible need for so-called bridging studies.

- If the success of the applicant in the prior studies is not sufficient, a research director must take a stand in the supervision plan if bridge studies are needed.
- If the applicant does not hold a previous degree in the field of research they are applying for, a research director must take a stand in the supervision plan on possible bridge studies.
- There can be maximum 30 ECTS of bridge studies. Bridge studies cannot be included in postgraduate studies of 40 ECTS.

NOTE: The selection criteria for postgraduate studies at Turku School of Economics are used in the selection for applications to the right to pursue a doctoral degree in Information Systems Science. See the selection criteria, including requirements for the research plan from https://www.utu.fi/en/university/turku-school-of-economics/research/doctoral-training/applying

Evaluation of applications for a fixed-term doctoral researcher position under an employment contract

In addition to the eligibility criteria related to the right to pursue a doctoral degree, criteria used in the selection of doctoral researchers for fixed-term doctoral researcher positions include:

The quality of the research plan and its feasibility in the planned schedule
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- Applicant's motivation;
- Applicant's competence evaluated on the basis of (when relevant) success in the prior studies, work
 experience, capability to conduct the planned research, international activities, scientific publications,
 and completed doctoral studies;

The evaluation is carried out as an overall assessment, but the research career ladder step has an impact on the evaluation e.g. completed doctoral studies or scientific publications are not expected of applicants who are at the beginning of their research career. For applicants who have already been granted the right to study a doctoral degree, the progress of doctoral research and studies is assessed.

Any other funding received by the applicant for doctoral studies can be taken into consideration when determining the duration of the doctoral researcher position. The Doctoral Programme is multidisciplinary and aims to promote all research fields, which may be taken into consideration when positions are filled.

Decisions

Study right decisions

The (Vice-)Dean of research affairs of the Faculty will decide on granting the right to study for a doctoral degree, based on the proposals of the steering committee of the Doctoral Programme and the statement from the department. All applicants will be personally informed about the decisions by 1 November 2024.

An admitted applicant has to notify the University of Turku of their acceptance of the study place by 13 December 2024 at 3:00 pm (local time in Finland) according to the instructions given in the admission notification. If the admitted applicant does not give the notification by the end of the allotted time period mentioned above, the applicant forfeits the study place. A person admitted to more than one university or polytechnic degree programme only notifies the one educational institution at which they choose to accept the study place. Notification, i.e. accepting a study place, is binding and may not be cancelled or changed later.

According to Finnish legislation, student may accept only one study place leading to a higher education degree in Finland during one academic term (autumn term 1.8.-31.12. or spring term 1.1.-31.7). This rule applies to all higher education. Higher education degrees included in the rule are Bachelor degrees and Master degrees awarded by Finnish universities of applied sciences, Bachelor degrees and Master degrees awarded by Finnish universities and Licentiate and Doctoral degrees awarded by Finnish universities. Only exemptions are Transfer student selections, the Åland Polytechnic and the Police College of Finland.

All students pursuing a doctoral degree must register for each study term as instructed by the University of Turku. Only students who have registered as being present can participate in the teaching and pursue studies at the university.

The applicants who have completed their prior degree in a country other than Finland and who are granted a study right in this call, need to deliver either the original degree certificates or certified copies of the original degree certificates and their translations to the University of Turku, as instructed in the admission notification, on 7 March 2025 at the latest. If the admitted applicant does not deliver the required certificates by the deadline, they forfeit the study right. Instructions on delivering certificates and country-specific requirements.

Doctoral researcher positions under employment contract decisions

The Head of the Department in question will decide on recruitment of the applicants for a fixed-term Doctoral Researcher positions, based on the proposals of the steering committee of the Doctoral Programme. All applicants will be personally informed about the decisions by 30 November 2024. The names of the persons who have been selected for the funded positions will be published on the website of Doctoral Programme





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(www.utu.fi/dpt). A selected applicant has to notify their acceptance of the position according to the instructions given in the offer notification.

Further instructions

http://www.utu.fi/dpt

Email: tech-doc@utu.fi (Faculty of Technology) or tsedoctoralprogramme@utu.fi (Turku School of Economics)

Coordinator (tech-doc@utu.fi; +358 50 348 9413), or Head of the Programme Kati Hanhineva (kati.hanhineva@utu.fi, (+358 50 472 1814)

Contact address of the faculty

Faculty of Technology tech-doc@utu.fi Faculty of Technology

Turku School of Economics
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Coordinator Jenni Gray
Turku School of Economics at the University of Turku
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Appendices

Appendix 1: Application documents for study right application

Appendix 2: Application documents for doctoral researcher position under an employment contract

Appendix 1. Application documents for study right application

Please fill the electronic application form on **My StudyInfo** and attach the required application documents into it, if not otherwise stated. Please make sure that all attachments are of good quality, are easy to read, full-colour scans or photographs of the complete required document. The application documents should be in pdf-format. Attachments that do not meet these requirements may be rejected.

a) Application for the right to study for a doctoral degree in the Faculty of Technology of the University of Turku

<u>In addition to</u> the electronic application form, documents 3-6 and possibly documents 7-9 must be submitted. In addition, documents 1-2 are recommended to be submitted.

b) Application for the right to study for a doctoral degree at the Turku School of Economics of the University of Turku (Information Systems Science as field of research)

<u>In addition to</u> the electronic application form, documents 3-4 and 6 and possibly documents 7-9 must be submitted. In addition, documents 1-2 are recommended to be submitted.

1) Curriculum vitae

Please see the instructions of TENK for writing a CV: http://www.tenk.fi/en/template-researchers-curriculum-vitae

2) List of publication

Please see the instructions in the website (Application documents): https://www.utu.fi/en/university/faculty-of-technology/doctoral-training/how-to-apply

3) Dissertation research plan (in English) (mandatory)

In the Faculty of Technology, the <u>maximum</u> length of the research plan in all is 5 pages (Times New Roman 12pt or equivalent; line spacing 1). Research plan should contain:

- Name of the applicant
- Planned title of the doctoral dissertation
- Description of research topic and scientific goals
- Research methods, experimental design and research environment
- Placement of the dissertation research in a possible wider research context of the group
- Timetable of research

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- Current state of doctoral thesis and postgraduate studies.
- List of references

For applicants in Information Systems Science the maximum length of research plan is 10 pages, and cover and list of references. See more information from the selection criteria for postgraduate studies at TSE: https://www.utu.fi/en/university/turku-school-of-economics/research/doctoral-training/applying

The research plan should follow the guidelines for the responsible conduct of research (see Responsible Conduct of Research (RCR) | Finnish National Board on Research Integrity TENK). By attaching the research plan to the application form the applicant gives permission for checking the research plan with Turnitin Originality Check (system for electrical plagiarism detection). The use of artificial intelligence (AI) to assist in the preparation of the research plan in a wider role than checking grammar or generating short expressions should be clearly indicated in the research plan.

4) A copy of the degree certificates and the transcript of study records (mandatory)

- **A.** If the applicant has <u>completed the former degree(s)</u> which make them eligible for doctoral studies <u>at a University in Finland</u>, the degree certificates, the transcripts of study records and other educational documents which may influence in the student selection must be attached in the electronic application form.
- **B.** If the applicant has <u>completed the former degree(s)</u> which make them eligible for doctoral studies <u>at a University abroad</u> (i.e. outside Finland), they must attach the following items to the electronic application form:
 - Scanned original degree certificates (in the same language as the degree was completed in)
 - Scanned original transcripts of study records (in the same language as the degree was completed in)
 - Scanned other original educational documents, which may be of relevance in the student selection.
 - If the original degree certificates, transcript of study records and other educational documents are
 not written in English, Finnish or Swedish, official translations of the documents to one of these
 languages must also be submitted. An official translation here refers to a translation of the
 educational documents issued by the awarding institution or a translation made by an
 authorized translator. A transcript in English can be replaced by a Diploma Supplement awarded
 by a European educational institution if it contains the information about completed courses and
 other study attainments.

Those applicants who have been granted a right to study and who have completed their prior degree abroad have to submit either the original degree certificates or certified copies of the degree certificates and other educational documents and the official translations of the documents to the University of Turku at the latest in 7 March 2025. If the admitted applicant does not deliver the required certificates by the deadline set in the admission notification, they forfeit the study right. Link to the instructions on delivering certificates and country-specific requirements.

C. In the Faculty of Technology, if the degree that gives eligibility for the study right for a doctoral degree is not completed by the deadline of application time, an up-to-date transcript of study records must be attached to the application.

Please make sure that all attachments are good-quality, easy to read, full-colour scans or photographs of the complete required document. Attachments that do not meet these requirements may be rejected.

If you have completed the former degree(s) which make you eligible for doctoral studies at a university abroad (i.e. outside Finland), please make sure to have original degree certificates and other relevant





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educational documents ready at hand if you are granted a right to study. Instructions will be given in the admission notification.

5) Applicants applying for a study right from the Faculty of Technology: Supervision plan signed by supervisor(s), a research director and the applicant (mandatory for study right applicants at the Faculty of Technology)

In the Faculty of Technology, a signed supervision plan is a mandatory attachment to the study right application. You must use the supervision plan template found here: https://www.utu.fi/en/research/utugs/dpt/admission.

6) Motivation letter (mandatory)

Motivation letter is maximum one page long freeform document, which includes the reasons for performing a doctoral degree in the Doctoral Programme in Technology, and also your career plans after graduation (e.g. with regards to academic career / in Finland or elsewhere).

7) Verification of language proficiency (possibly mandatory, check below)

The University of Turku follows the Rector's decision (15 Aug 2019) on the means of verifying one's language proficiency. If the applicant is required to prove their language proficiency with a language test, a scanned certificate of a completed language test must be attached to the application. See language requirements on the website of the university's graduate school: https://www.utu.fi/en/research/utugs/how-to-apply/language

8) Copy of a valid passport (possibly mandatory, check below)

Attach a copy of your valid passport or official identification card with photo and information on citizenship. If you have a Finnish personal identity code and you have entered it on the application form, you do not need to attach a copy of your passport.

9) A statement of continuous commitment by a company/organization (outside UTU) to an employee's doctoral degree (potentially needed, check below)

A freeform document, in which a company / organization (representative of a company / organization, e.g. superior) express of being aware of the applicant's post-graduate studies and shows support (e.g. level or type of support, possible resources) for applicant's studies while the applicant works at the same time at the company / organization. The commitment should express also the impact of the thesis work for the company / organization.



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Appendix 2. Application documents for doctoral researcher position under an employment contract

Please fill the electronic application form on **TalentAdore** and attach the required application documents into it, if not otherwise stated. Please make sure that all attachments are of good quality, are easy to read, full-colour scans or photographs of the complete required document. **The application documents should be in pdf-format.** Attachments that do not meet these requirements may be rejected. The absence of mandatory annexes will affect the assessment.

<u>In addition to</u> the electronic application form, documents 1 and 3-7 are mandatory attachments, and in addition attachment 2 is recommended to be submitted.

1) Curriculum vitae (mandatory)

Please see the instructions of TENK for writing a CV: http://www.tenk.fi/en/template-researchers-curriculum-vitae

2) List of publication (needed if you have publications)

Please see the instructions in the website (Application documents): https://www.utu.fi/en/university/faculty-of-technology/doctoral-training/how-to-apply

3) Dissertation research plan (in English) (mandatory)

In the Faculty of Technology, the <u>maximum</u> length of the research plan in all is 5 pages (Times New Roman 12pt or equivalent; line spacing 1). Research plan should contain:

- Name of the applicant
- Planned title of the doctoral dissertation
- Description of research topic and scientific goals
- Research methods, experimental design and research environment
- Placement of the dissertation research in a possible wider research context of the group
- Timetable of research
- Current state of doctoral thesis and postgraduate studies.
- List of references

For applicants in Information Systems Science the maximum length of research plan is 10 pages, and cover and list of references. See more information from the selection criteria for postgraduate studies at TSE: https://www.utu.fi/en/university/turku-school-of-economics/research/doctoral-training/applying

The research plan should follow the guidelines for the responsible conduct of research (see Responsible Conduct of Research (RCR) | Finnish National Board on Research Integrity TENK). By attaching the research plan to the application form the applicant gives permission for checking the research plan with Turnitin Originality Check (system for electrical plagiarism detection). The use of artificial intelligence (AI) to assist in the preparation of the research plan in a wider role than checking grammar or generating short expressions should be clearly indicated in the research plan.



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- 4) A copy of the degree certificates and the transcript of study records (mandatory)
 - **A.** If the applicant has <u>completed the former degree(s)</u> which make them eligible for doctoral studies <u>at a University in Finland</u>, the degree certificates, the transcripts of study records and other educational documents which may influence in the student selection must be attached in the electronic application form.
 - **B.** If the applicant has <u>completed the former degree(s)</u> which make them eligible for doctoral studies <u>at a University abroad</u> (i.e. outside Finland), they must attach the following items to the electronic application form:
 - Scanned original degree certificates (in the same language as the degree was completed in)
 - Scanned original transcripts of study records (in the same language as the degree was completed in)
 - Scanned other original educational documents, which may be of relevance in the student selection.
 - If the original degree certificates, transcript of study records and other educational documents are not written in English, Finnish or Swedish, official translations of the documents to one of these languages must also be submitted. An official translation here refers to a translation of the educational documents issued by the awarding institution or a translation made by an authorized translator. A transcript in English can be replaced by a Diploma Supplement awarded by a European educational institution if it contains the information about completed courses and other study attainments.

Those applicants who have been granted a right to study and who have completed their prior degree abroad have to submit either the original degree certificates or certified copies of the degree certificates and other educational documents and the official translations of the documents to the University of Turku at the latest in 7 March 2025. If the admitted applicant does not deliver the required certificates by the deadline set in the admission notification, they forfeit the study right. Link to the instructions on delivering certificates and country-specific requirements.

C. In the Faculty of Technology, if the degree that gives eligibility for the study right for a doctoral degree is not completed by the deadline of application time, an up-to-date transcript of study records must be attached to the application.

Please make sure that all attachments are good-quality, easy to read, full-colour scans or photographs of the complete required document. Attachments that do not meet these requirements may be rejected.

If you have completed the former degree(s) which make you eligible for doctoral studies at a university abroad (i.e. outside Finland), please make sure to have original degree certificates and other relevant educational documents ready at hand if you are granted a right to study. Instructions will be given in the admission notification.

5) Supervisor's statement (mandatory)

Dissertation supervisor from the University of Turku will fill in a statement form on the RefApp-platform after the call closes. The applicant will receive a personal link to the RefApp-platform on 13.9.2024, and will have to provide the contact details (name, email address and phone number) of their dissertation supervisor (UTU). After this, the supervisor will receive a personal link to the RefApp-platform, where they will be able to fill the supervisor's statement form. The supervisor's statement must be submitted to RefApp by 20 September 2024.

The questions included in the supervisor's statement form can be found on the <u>Admission Criteria and Instructions for Applicants</u> -webpage ("Application documents when applying for a doctoral researcher position under an employment contract").





6) Motivation letter (mandatory)

Motivation letter is maximum one page long freeform document, which includes the reasons for performing a doctoral degree in the Doctoral Programme in Technology, and also your career plans after graduation (e.g. with regards to academic career / in Finland or elsewhere).

7) Transcript of study records of completed post-graduate studies (mandatory for funded position applicants who already have the study right)