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Call for Applications for Doctoral Researcher Positions at the University of Turku Graduate School Doctoral Programme in Exact Sciences (EXACTUS)

In this call for applications, you can apply for the right to study for a doctoral degree in the Faculty of Science of the University of Turku [Doctoral Programme in Exact Sciences \(EXACTUS\)](#) and/or for a fixed-term Doctoral Researcher position under an employment contract. Please read more specific instructions below and apply on 16 September 2022 at the latest.

Short description of the doctoral programme

In the EXACTUS doctoral programme, the following academic disciplines are represented: applied mathematics, astronomy, chemistry, materials science, mathematics, physics, statistics and theoretical physics. The supervisors of the doctoral researchers are mainly from the Department of Physics and Astronomy, Department of Chemistry, Department of Mathematics and Statistics, the Finnish Centre for Astronomy with ESO or the Turku PET Centre. The website of the doctoral programme can be found at www.utu.fi/EXACTUS.

Application period and what can be applied for

During the application period 29 August - 16 September 2022, you can apply for:

- a) **The right to pursue a doctoral degree at the University of Turku at the Faculty of Science at the Doctoral Programme in Exact Sciences from 1 January 2023 onwards**



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

The position of a Doctoral Researcher is set to begin on 1 January 2023 at the earliest and for the duration of a maximum of four years (up to until 31 December 2026). The positions are primarily intended for full-time doctoral dissertation research with the aim of completing the doctoral degree in four years. 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 is taken into account. The maximum length for a Doctoral Researcher position is four years. 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 Physics and Astronomy, Department of Chemistry, Department of Mathematics and Statistics, the Finnish Centre for Astronomy with ESO, or the Turku PET Centre.

A doctoral researcher position requires living in Finland for the duration of the employment contract.

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. The component based on personal performance is 6–50% of the task-specific salary. The task-specific salary component of an entry-level Doctoral Researcher is in general on level 2, in which case the salary range is typically about



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2 234 – 2 460 € per month at the beginning of the employment relationship. A probationary period of 6 months applies.

The EXACTUS doctoral programme uses a matching funding model, in which the University of Turku Graduate School (UTUGS) funding can be granted for a maximum of 24 months per Doctoral Researcher. The applicant can apply for a funding period (funded doctoral training position) of maximum 48 months from the EXACTUS doctoral programme. Of this funding period, maximum 24 months of this funding can be UTUGS funding, and the rest of the required funding (matching funding) must be arranged together with the Doctoral Researcher's supervisor and the department.

c) Both of the above (a and b)

Those applicants who are not citizens of an EU/EEA country and who have been granted a right to study for a doctoral degree at the University of Turku in the spring 2022 application round or who are granted a right to study in the autumn 2022 application round may apply for the [Finland Fellowship funding](#) for the year 2023. The funding is applied for by checking the corresponding field on the application form.

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§); 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



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condition that the applicant graduates and submits a scanned degree certificate and a transcript of study records to the University of Turku email sci-docstudies@utu.fi by 16 November 2022.

- You must fulfil the [University of Turku language skill requirements](#);
- You are required to fulfil the prerequisites set by the Faculty of Science for granting a right to study. For more information, see the section “Assessment of applications”.

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 doctoral studies of the Faculty of Science in the University of Turku in the Doctoral Programme in Exact Sciences (EXACTUS). If you have not yet been granted a right to study, you must apply for a right to pursue a doctoral degree in the Faculty of Science in the EXACTUS Doctoral Programme within this call for applications. 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

The right to study for a doctoral degree and/or fixed-term Doctoral Researcher positions are applied for by filling in an electronic form and attaching the required additional documents. [A link to the electronic form will be published on the website of the graduate school.](#) The form will be accessible as the application period begins on 29 August 2022 and closes at 11:59 pm on 16 September 2022.



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Application documents are specified at the end of this call for applications (Appendix 1) and on the website of the doctoral programme. [A link to the website where the instructions for the application will be published.](#)

It is recommended that application documents are written in English. All of the required attachments must be submitted before the end of the application period. Applications that arrive after the application period has ended will not be processed. The application documents will not be returned to the sender.

Applying for the right to study:

The application procedure for the right to pursue the doctoral degree has **two phases**. In the first phase, the applicant submits an application (the electronic form) where they describe themselves and their plans regarding the doctoral studies and a dissertation. The doctoral programme evaluates all the applications and checks the eligibility of the applicant, how the applicant's research topic interests fit the profile of the programme, and assesses the merits of the applicants. Moreover, the doctoral programme checks if it can offer two suitable supervisor and research director to the applicant.

A doctoral researcher should have a research director, a principal supervisor and at least one other supervisor. The research director should have an employment contract to the department where the major subject of the doctoral degree is based and the title of the research director should be a professor. In an exceptional case, if there is no professor available, an associate professor can be nominated as a research director. The principal supervisor should be a professor, associate professor, assistant professor or adjunct professor/docent and in most of the cases have an employment contract to the University of Turku. Other supervisors should hold a doctoral degree.

The most competitive applicants for whom the programme can offer two supervisors will be invited to the second phase. These applicants will be contacted personally



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and the programme will appoint supervisors and a research director to them. Together with supervisors the applicant compiles a second phase application which includes a research plan and a financing plan, and if required, a statement from the research director (see section 5.).

Assessment of applications

The applications are reviewed by the steering committee of the doctoral programme. If needed, the applicants can be interviewed. The research plans attached to the applications may be checked with the *Turnitin OriginalityCheck* plagiarism detection software in accordance with the University of Turku quality assurance system.

In addition to the eligibility criteria related to the right to pursue a doctoral degree, also the applicant's motivation, merits, completed studies, grade of the master's thesis (or corresponding work) and capability to complete a doctoral degree, as well as the quality and feasibility (in the planned schedule) of the research plan are taken into account in the selection of doctoral researchers.

Postgraduate applicants are required to have completed the advanced studies in the Master's degree with at least the grade "Good" or equivalent (Grade 3 in the Finnish grading system). If this is not the case, or if the subject of the Master's degree differs from the field of research of the intended postgraduate studies, researchers will be asked to supplement their knowledge and skills to achieve the required level. A research director nominated for the doctoral researcher will give a statement of possible required bridging studies in these exceptional cases.

The chosen applicants must have a good knowledge of the English language. A prerequisite for admission is that there is at least two persons who have agreed to act as a supervisor and who fulfils the qualification requirements for supervisors. Additionally, the research topic of the doctoral researcher must fit the profile of the doctoral programme.



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The doctoral programme is multidisciplinary and aims to further all relevant research fields, which may be considered when filling the Doctoral Researcher positions. Any other funding received by the applicant for doctoral studies is taken into consideration when determining the duration of the Doctoral Researcher funded position.

Decisions

The Dean/Vice Dean of research affairs of the faculty decides on granting the right to study for a doctoral degree based on the proposal of the steering committee of the doctoral programme. The Head of the department decides on recruitment of the applicant for the position of a Doctoral Researcher based on the proposal of the steering committee of the doctoral programme.

All applicants will be personally informed about the decisions. The names of the applicants who have been selected for the position of a Doctoral Researcher will be announced on the website of the doctoral programme by the end of November 2022.

An admitted applicant has to notify the University of Turku of their acceptance of the study place by 3:00 pm (local time in Finland) on 15 December 2022 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 university legislation, an applicant may accept only one study place leading to a higher education degree in Finland during one academic term (autumn term 1 Aug – 31 Dec or spring term 1 Jan – 31 Jul). This rule applies to all higher education, i.e. Bachelor's and Master's level degrees awarded by Finnish universities of applied



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sciences, Bachelor's and Master's degrees awarded by Finnish universities, and Licentiate and Doctoral degrees awarded by Finnish universities. This regulation is not applied to study rights received in transfer student selections, from the Åland University of Applied Sciences, from the Police University College, and from institutions of higher education outside Finland.

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 3 March 2023 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](#).

Further instructions

[Link to EXACTUS website](http://www.utu.fi/EXACTUS/) (<http://www.utu.fi/EXACTUS/>)

[Link to instructions on how to apply to doctoral training in the Faculty of Science](#)
sci-docstudies@utu.fi

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APPENDIX 1. Description of the application documents (PDF)

Please fill the electronic application form and attach the required application documents with it, if not otherwise stated. The application documents should be in pdf-format.

a) Applying for a right to study for a doctoral degree

Attach to the electronic application form the documents 1-2 and 4-5, and if mandatory for you, document 6:

1. Curriculum Vitae (CV)
2. Publications list
4. Degree certificates and the transcript of study records
5. Motivation letter
6. Verification of language proficiency (*check from Appendix section 6. whether this is mandatory for you*)

b) Applying for a Doctoral Researcher position

Attach to the electronic application form the documents 1-4:

1. Curriculum Vitae (CV)
2. Publications list
3. Research plan
4. Degree certificates and the transcript of study records

c) Applying for both of the above, i.e. a right to study a doctoral degree and a Doctoral Researcher position.

Attach to the electronic application form the documents 1-2 and 4-5, and if mandatory for you, possibly document 6.

1. Curriculum Vitae (CV)
2. Publications list
4. Degree certificates and the transcript of study records
5. Motivation letter
6. Verification of language proficiency (*check from Appendix section 6. whether this is mandatory for you*)



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1. Curriculum Vitae (CV)

[Link to instructions by the Finnish National Board on Research Integrity \(TENK\) for writing a CV.](#)

2. Publications list

Links to publications list instructions in [English](#) and in [Finnish](#).

3. Research plan (in English)

If an applicant **already has the right to study from the EXACTUS doctoral programme**, then they have to attach a research plan to their application. The maximum length of the research plan is **3 pages (including references)**. The research plan should contain:

- Name of the applicant
- The planned title of the doctoral dissertation
- Research topic in the context of the field
- Scientific motivation and goals
- Methods and environment of the research
- Applicants own role and specialization in the study
- Timetable of research
- Current state of doctoral thesis and postgraduate studies.

Those **applicants who apply for the study right**, will write a research plan in the second application phase. The applicant will write the plan together with their supervisor.



The research plans attached to the applications can be checked via the Turnitin OriginalityCheck plagiarism detection software, in accordance with the quality assurance system of the University of Turku.

4. Degree certificates and transcripts of study records

a) If you have completed your former degree(s) that make you eligible for doctoral studies at a **higher education institution in Finland**, you must attach the following items to the electronic application form:

- a. scanned original degree certificates
- b. scanned original transcripts of study records
- c. scanned original other educational documents which may be of relevance in the student selection and that you are applying based on.

b) If you have completed your former degree(s) that make you eligible for doctoral studies at a **higher education institution abroad (i.e. outside of Finland)**, you must attach the following items to the electronic application form:

- a. scanned original degree certificates (in the language that the degree was completed in)
- b. scanned original transcripts of study records (in the language that the degree was completed in)
- c. scanned other original educational documents which may be of relevance in the student selection and that you are applying based on.

If the **original degree certificates or transcripts of study records are not written in English, Finnish or Swedish**, official translations 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 and a translation made by an authorised translator. A transcript in English can be replaced by a Diploma Supplement (DS) awarded by a European educational



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institution, provided that it contains the information about completed courses and other study attainments.

- c) 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.

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. Motivation letter (applicants for a right to study)

The motivation letter is one page long freeform document, which includes the reasons for applying for the doctoral studies in the EXACTUS Doctoral Programme.

6. Verification of language proficiency (*potentially mandatory*)

The University of Turku follows the Rector's decision (15 Aug 2019) on the means of verifying one's language proficiency. [See the language requirements on the webpage of the university's graduate school.](#)

If you are required to prove your language proficiency with a language test, a scanned certificate of a completed language test must be attached to the application.

The applicant must deliver all required attachments by the end of the application period. Late applications will not be processed.