

## Conditions of the admission procedure for doctoral study programmes at the Faculty of Science, Charles University, for the academic year 2023/2024

The admission procedure is initiated by a completely and correctly filled application and by a payment of the admission fee. Both things must be done by 30<sup>th</sup> April 2023.

### Conditions for admission

- The applicants must finish their master studies and provide a confirmation of such no later than on 30<sup>th</sup> September 2023. The applicants who take the final state exam in the autumn term and the applicants who are still waiting for recognition of their foreigner diploma on 30<sup>th</sup> September 2023 will provide the confirmation by 22<sup>nd</sup> October, 2023. The applicants with a diploma from Czech universities will provide an authenticated copy of their diploma or an original confirmation of completion of a master study programme. This is not required from applicants who have completed their studies at Charles University. The applicants from universities abroad will provide such a proof in one of the manners described at the following link: <https://www.natur.cuni.cz/eng/admission/education-obtained-abroad/nostrification-for-applicants-for-master-and-doctoral-programmes-of-study>
- Successful passing of the entrance exam (unless waived).
- All the applicants who obtain at least 50 points (out of 100) at the exam will be accepted.

### Application for a doctoral study programme and the admission fee

The **application** is submitted electronically through the Charles University study information system at <https://is.cuni.cz/studium/eng/prijimacky>. The completed application must be **submitted electronically** in the study information system no later than on 30<sup>th</sup> April 2023 (**no** hard copy is sent by mail). The e-mail address and password provided are used to access the system throughout the whole admission procedure.

If a student is interested in multiple study programmes, separate applications must be submitted for each programme.

### *Application appendices:*

- Curriculum vitae (obligatory)
- Transcript of current master's study courses or addendum to master's diploma (obligatory)
- Information about the planned dissertation project including annotation in the form available at <https://www.natur.cuni.cz/eng/admission/forms> (mandatory attachment). The annotation of the planned dissertation project should be discussed with the prospective supervisor. Requirements for the structure and details of the annotation are specified for each programme of study (listed below). This appendix is not mandatory for the PhD programmes Physical Chemistry, Macromolecular Chemistry, Modelling of Chemical Properties of Nano- and Biostructures, Developmental and Cell Biology. (Note: the annotation of the planned dissertation project is not binding in case of admission of the candidate and may change according to the specifications of the specific department.)
- A motivation letter is also required for the following doctoral study programmes: Demography, Didactics of Geography, General Geography, Regional and Political Geography, Social Geography and Regional Development.
- List of applicant's published and unpublished work (or expert assessments of this work) and other documentation worth consideration (e.g. documentation of specialized courses completed, language examinations). (optional)

The **admission fee** is 730 CZK and it is paid for each submitted application. It must be paid by 30<sup>th</sup> April, 2023.

Payment information:

Account name: Univerzita Karlova

Account number: 19-2764980247/0100, KB Praha – město, Václavské náměstí 42, 114 07, Praha 1

Constant symbol: 0308

Variable symbol: 988018

IBAN: CZ8701000000192764980247

SWIFT (BIC): KOMBCZPPXXX

Specific symbol: ID number generated by the information system after filling out the application. In the note for the recipient provide the name of the candidate.

If paying from abroad, you need to **pay all fees** related to the transfer.

If the application does not meet all the requirements or the admission has not been paid, the faculty will ask the candidate to correct these issues and provide him/her with an adequate time to do so. If the applicant fails to correct the issues, the application will not be processed. Fees are non-refundable.

**Entrance exam**

Regular date: 12. 6. – 23. 6. 2023

Alternative date: 10. 7. – 18. 7. 2023

The **invitation** for the entrance exam is **only sent in electronically** through the university's electronic information system no later than 30 days before the date of the exam. If the faculty sends an invitation for an alternative date of the entrance exam, this deadline may be shortened accordingly.

Entrance exam on an **alternative date** may be permitted by the dean to candidates who submit a written request **within three days** after the regular exam date. Only serious reasons are grounds for granting an alternative date, particularly health reasons. The request must be sufficiently justified in writing and the circumstances stated in the request must be documented. A second alternative date is not permitted. The request for an alternative day **is submitted and approved via [the electronic information system of the university](#)**.

A candidate may, **for reasons of a physical handicap**, including specific learning disorders, request adaptation of the entrance exam. The request must state specific adaptation requirements for the entrance exam, and it must be accompanied by a medical report or a statement from a competent professional facility. Decisions on requests are made by the dean. If necessary, the dean may request additional documentation.

The request must **be submitted electronically** by 30<sup>th</sup> April 2023 via [the electronic information system of the university](#). Medical handicap requests made later (e.g. during appeal) cannot be taken into account.

- The entrance exam is one round, and it consists of one or more parts (as specified for individual study programmes).
- Based on a written request submitted electronically together with the application, but no later than by 10<sup>th</sup> May 2023, the dean may permit that the entrance exam will take place via information and communication technology, but only for serious and documented reasons such as health or study abroad.

- During the entrance examination the candidate must demonstrate the technical and linguistic skills to study the given field, along with abilities necessary for independent scientific work.
- The examination is graded with a maximum of 100 points. The evaluation may include the quality of the dissertation project, its feasibility and the way of presentation (specified for individual programmes).

#### **Access to own file**

After receiving the dean's decision on the result of the admissions proceeding, the candidate is entitled to access his file. The organizational and administrative conditions for perusal are established by a dean's measure.

#### **More detailed information is available at the Study Department**

Mailing address: Univerzita Karlova, Přírodovědecká fakulta, Studijní odbor, Albertov 6, 128 00 Prague 2

For personal contact:

Student Affairs Division (Studijní odbor), Na Slupi 16 (in the Botanical garden), Prague 2

Programmes in biology: Věra Šmídová, tel. +420221951163, e-mail:

[vera.smidova@natur.cuni.cz](mailto:vera.smidova@natur.cuni.cz)

Other study programmes: Nataša Tymichová, tel. +420221951162, e-mail:

[natasa.tymichova@natur.cuni.cz](mailto:natasa.tymichova@natur.cuni.cz)

Foreigner applicants (not Slovakia): Mgr. Valerie Havrdová, phone number +420 221951154, e-mail: [valerie.havrdova@natur.cuni.cz](mailto:valerie.havrdova@natur.cuni.cz)

#### **More information is available on the website:**

<https://www.natur.cuni.cz/eng/admission/ph.d.-study>

<https://www.natur.cuni.cz/eng/study/student-affairs-division>

## Overview of doctoral study programmes in the academic year 2023/2024

<p><b>All the study programmes are both full-time and part-time study, the standard length of study is 4 years, the languages of instruction are Czech and English.</b></p>	
<p><b>Study programmes without specialization</b></p>	<p><b>Information about the entrance exam</b>  <i>The interview will deal mainly with the dissertation plane and candidate's knowledge in the given field of study. Extra requirements are listed for each study programme.</i></p>
<p>Analytical Chemistry</p>	<p>1) A brief verification of knowledge of analytical chemistry to the extent related to master's study.  2) Reading and translation to verify ability to work with professional literature written in English.  3) A brief discussion on planned dissertation work.</p>
<p>Inorganic Chemistry</p>	<p>To facilitate the course of the interviews, the candidate prepares a short summary of their past studies and professional work. The candidate presents this summary briefly (approx. 5 minutes). The candidate also provides a list and copies of published articles, academic awards and other documents that may add extra information. The committee has the right to have the exam in a written form – for example in a form of a test to prove the candidate's knowledge in inorganic chemistry (at the level of master studies). The committee's decision is based on a complex evaluation of professional and language skills of the candidate, his overall motivation and dispositions for independent scientific work.</p>
<p>Biochemistry</p>	<p>The interview is divided into two parts that are aimed at testing both scientific and language skills of the candidate:  1) short introduction and discussion of the candidate's dissertation plan  2) proving knowledge of biochemistry at the master level.</p>
<p>Didactics of Chemistry</p>	<p>The interview will take into account both expertise in the subject matter and language skills.</p>
<p>Physical Chemistry</p>	<p>The applicant prepares a roughly 3-minute presentation (no more than 5 minutes) in which they tell the committee about the results of their master thesis, potentially with an abstract of their publication. There is no access to a projector.</p>

Macromolecular Chemistry	The applicant prepares a roughly 3-minute presentation (no more than 5 minutes) in which they tell the committee about the results of their master thesis, potentially with an abstract of their publication. There is no access to a projector.
Modelling of Chemical Properties of Nano- and Biostructures	The entrance consists of three parts: 1) Past scientific work of the candidate (who prepares a 3-5-minute presentation) 2) Candidate's motivation and their plan of doctoral research 3) Examination of skills necessary for computer modelling (esp. physical chemistry and chemical physics)
Organic Chemistry	Written preparation takes one hour. After that, the candidates are invited to an oral exam. It consists of two parts: 1) Short introduction of a planned doctoral project 2) Test of knowledge of organic chemistry (based on the book Organic Chemistry by John McMurry).
Anthropology and Human Genetics	
Botany	The applicant provides the committee with a dissertation project (topic and content) both in written and electronic form. It is recommended that the project is signed by a potential supervisor. The project shall include scientific contribution, realisation plan, funding possibilities and links to the existing research of current research teams. The project is usually 1 to 3 pages long. For the entrance exam, the applicant prepares a presentation of the project for approx. 10 minutes. The committee assesses, apart from scientific skills, mainly this presentation, importance and relevance of the topic (also in relation to existing research in the field) and the clarity of the presentation.
Ecology	
Experimental Plant Biology	The applicant must be capable of critical biological thinking, be able to formulate relevant questions and hypotheses, and critically evaluate results. At the same time, the candidate must demonstrate high motivation for scientific work, sufficient orientation in the field and knowledge of English. The entrance examination consists of two parts: 1) First, the candidate will present (without technical

	<p>support) his/her research activities to date, including key outputs and placing the work in a broader context. The candidate will give an outline presentation of the pre-selected dissertation topic, including information on research funding opportunities (5-10 min. in total).</p> <p>2) In the second follow-up part of the entrance examination, there will be a discussion of the topics presented and the committee will ask the candidate several questions to assess the candidate's broader orientation in the field of plant biology.</p>
Animal Physiology	<p>The entrance exam has 3 parts:</p> <ol style="list-style-type: none"> <li>1) A summary of the applicant's previous practical experience and previous scientific work.</li> <li>2) A short presentation of the planned dissertation project.</li> <li>3) An examination of the candidate's knowledge in relation to the planned dissertation topic and his/her broader orientation in the field of animal physiology.</li> </ol>
Immunology	<p>The entrance exam consists of more parts in forms of presentations, interviews and discussions based on written preparation tasks given by the committee. The applicants present their results from their master studies and doctoral project proposal. The whole entrance exam takes place in one day.</p>
Microbiology	
Molecular and Cellular Biology, Genetics and Virology ( <i>biomedicine study programme</i> )	<p>The admission interview includes a brief (max. 5 minutes) presentation. During this presentation, the applicant discusses their future doctoral project or at least the general ideas about their doctoral activities and specialization. The applicant may also talk about their master studies or other professional experience. The presentation is done without a PowerPoint or other material prepared in advance. The committee then asks follow-up questions.</p>
Parasitology	<p>The committee assesses:</p> <ol style="list-style-type: none"> <li>1. Quality and presentation of the doctoral project – the candidate may attach a summary to their application as an optional supplement or they can bring it to the interview (hypothesis, the time plan and methodology). Both the presentation and the reaction to committee's questions are assessed.</li> <li>2. Previous scientific work – previous activities, especially</li> </ol>

	<p>(but not exclusively) those that are related to the doctoral project; publications and grant activities are prioritized</p> <p>3. Knowledge and orientation of the candidate in the field with special regards to the project – the candidate must prove knowledge of the current affairs in the field and especially in the research related to the project, the candidate must show ability to evaluate scientific hypotheses, the committee may also pay attention to previous study results.</p>
<p>Developmental and Cell Biology <i>(biomedicine study programme)</i></p>	<p>The entrance exam consists of more parts in forms of presentations, interviews and discussions based on written preparation tasks given by the committee. The applicants present their results from their master studies. The whole entrance exam takes place in one day. The list of possible topics and supervisors offered for the academic year 2023/2024 will be available on the website of the Department of Cell Biology (<a href="https://www.natur.cuni.cz/biologie/bunecna-biologie/studium">https://www.natur.cuni.cz/biologie/bunecna-biologie/studium</a>) after 1st March 2023. We recommend that the candidates contact the supervisors in advance to discuss available projects and their requirements.</p>
Theoretical and Evolutionary Biology	
Zoology	
Philosophy and History of Science	
Environmental Science	
Applied Geology	<p>To facilitate and accelerate the admissions process for doctoral study, it is desirable that the candidate prepares a short summary of their previous professional activities and possibly presents their master thesis, publications, research results or abstracts from conferences they have attended.</p> <p>In the second part of the interview the candidate presents the scientific aim of their doctoral project.</p> <p>The committee assesses the candidate's motivation, current study and research results, along with the quality and feasibility of the project.</p>
Geology	<p>At the doctoral study admissions interview, the candidate should have their master thesis, a list of publications or abstracts from conferences they participated in and any academic awards they have received.</p>

	<p>To facilitate and accelerate the admissions process, the candidate prepares a roughly 5- to 10-minute presentation with the following:</p> <ul style="list-style-type: none"> <li>- a summary of their previous professional activity (master thesis)</li> <li>- motivation and for pursuing doctoral studies</li> <li>- the basic research involved in the doctoral project</li> </ul> <p>The committee assesses the overall motivation of the candidate, language skills, previous research activities as well as the quality and possible realization of the suggested project.</p>
Demography	<p>The candidates prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following:</p> <ul style="list-style-type: none"> <li>a) summary of previous scientific activities</li> <li>b) brief presentation of the doctoral project</li> </ul> <p>The committee assesses the candidate's overall motivation, their language abilities, previous scientific results, quality and feasibility of the doctoral project.</p>
Didactics of Geography	<p>The candidates prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following:</p> <ul style="list-style-type: none"> <li>a) summary of previous scientific activities</li> <li>b) brief presentation of the doctoral project</li> </ul> <p>The committee assesses the candidate's overall motivation, their language abilities, previous scientific results, quality and feasibility of the doctoral project.</p>
Physical Geography and Geoecology	<p>The candidates prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following:</p> <ul style="list-style-type: none"> <li>a) summary of previous scientific activities</li> <li>b) brief presentation of the doctoral project</li> </ul> <p>The committee assesses the candidate's overall motivation, their language abilities, previous scientific results, quality and feasibility of the doctoral project.</p>
Geoinformatics, Cartography and Remote Sensing	<p>The candidates prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following:</p> <ul style="list-style-type: none"> <li>a) summary of previous scientific activities</li> <li>b) brief presentation of the doctoral project</li> </ul> <p>The committee assesses the candidate's overall motivation,</p>



	their language abilities, previous scientific results, quality and feasibility of the doctoral project.
General Geography	<p>The candidates prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following:</p> <ul style="list-style-type: none"> <li>a) summary of previous scientific activities</li> <li>b) brief presentation of the doctoral project</li> </ul> <p>The committee assesses the candidate's overall motivation, their language abilities, previous scientific results, quality and feasibility of the doctoral project.</p>
Regional and Political Geography	<p>The candidates prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following:</p> <ul style="list-style-type: none"> <li>a) summary of previous scientific activities</li> <li>b) brief presentation of the doctoral project</li> </ul> <p>The committee assesses the candidate's overall motivation, their language abilities, previous scientific results, quality and feasibility of the doctoral project.</p>
Social Geography and Regional Development	<p>The candidates prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following:</p> <ul style="list-style-type: none"> <li>a) summary of previous scientific activities</li> <li>b) brief presentation of the doctoral project</li> </ul> <p>The committee assesses the candidate's overall motivation, their language abilities, previous scientific results, quality and feasibility of the doctoral project.</p>