

## Conditions of the 2<sup>nd</sup> 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 15<sup>th</sup> December 2023.

### Conditions for admission

- The applicants must finish their master studies and provide a confirmation of such no later than on 29<sup>th</sup> February 2024.  
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/nostification-for-applicants-for-master-and-doctoral-programmes-of-study>
- Successful passing of the entrance exam
- Applicants will be accepted to study the programme Bioinformatics and computational biology if they obtain a grade "Pass" in each of the three answers to the questions set by the committee.
- All applicants who obtain at least 50 points out of 100 in the entrance examination will be admitted to study other programmes.

### 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 15<sup>th</sup> December 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/fakulta/uchazeci/formulare/informace-o-planovanem-disertacnim-projektu> (obligatory). The annotation of the planned dissertation project should be discussed with the prospective supervisor. This appendix is not mandatory for the study 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.
- List of published and unpublished works of the applicant (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 15<sup>th</sup> December, 2023.

Payment information – payment from czech bank account:

Account name: Univerzita Karlova

Account number: 19-2764980247/0100

Variable symbol: 988018

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.

Payment information – payment from foreign bank account:

Account name: Univerzita Karlova

IBAN: CZ8701000000192764980247

SWIFT (BIC): KOMBCZPPXXX

Bank address: KB Praha – město, Václavské náměstí 42, 114 07, Praha 1

In the note for the recipient provide the name of the candidate.

If paying from a foreign bank account, 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: 2<sup>nd</sup> February 2024

Alternative date: 9<sup>th</sup> February 2024

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**.

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 20<sup>th</sup> December 2023 via the information system of the university.

The entrance exam is one round, and it consists of one or more parts (as specified for individual study programmes).

- The entrance exam is one round and it consists of one or more parts (as specified for individual study programmes).
- For compelling and documented reasons, in particular health reasons or study abroad, the Dean may, on the basis of a request submitted in the University's electronic information system, as a rule after the application has been accepted by the Faculty, but no later than 20 December 2023,

allow the admission examination to be conducted via information and communication technologies.

- 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:

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

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>
Biochemistry	<p>The interview is divided into two parts that are aimed at testing both scientific and language skills of the candidate:</p> <ol style="list-style-type: none"> <li>1) short introduction and discussion of the candidate's dissertation plan</li> <li>2) proving knowledge of biochemistry at the master level.</li> </ol>
Physical Chemistry	<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	<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>
Modelling of Chemical Properties of Nano- and Biostructures	<p>The entrance consists of three parts:</p> <ol style="list-style-type: none"> <li>1) Past scientific work of the candidate (who prepares a 3-5-minute presentation)</li> <li>2) Candidate's motivation and their plan of doctoral research</li> <li>3) Examination of skills necessary for computer modelling (esp. physical chemistry and chemical physics)</li> </ol>
Organic Chemistry	<p>Written preparation takes one hour. After that, the candidates are invited to an oral exam. It consists of two parts:</p> <ol style="list-style-type: none"> <li>1) Short introduction of a planned doctoral project</li> <li>2) Test of knowledge of organic chemistry (based on the book Organic Chemistry by John McMurry).</li> </ol>
Anthropology and Human Genetics	
Bioinformatics and computational biology	<p>The candidate prepares and attaches a written (approximately 250-500 words) proposal for a doctoral project to the application form. The entrance examination will be in English and will have two parts. In the first part, the applicant will present themselves and their doctoral project in a short (max 10 minutes) presentation. In the second part of the examination, the committee will ask the candidate three questions. One question will focus on the project itself, and the other two questions will test the orientation in the field regarding the</p>

	proposed project's topic and the applicant's field of study. The committee will evaluate each answer with a Pass/Fail statement. The candidate must receive a Pass for all three answers..
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
Molecular and Cellular Biology, Genetics and Virology ( <i>biomedicine study programme</i> )	The applicant must briefly (5 min at maximum!) talk in English about his/her proposed doctoral project. However, this talk must be without notes, i.e. without any prepared ppt/pdf/other presentation! The questions of the members of the admission committee will follow this talk and will be also in English (the answers must be in English as well). The annotation of the proposed doctoral project should contain (besides the preliminary title of the project) a brief description of the respective topic, the proposed methodical approaches and the expected SCIENTIFIC gains.
Parasitology	The committee assesses: 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. 2. Previous scientific work – previous activities, especially
Developmental and Cell Biology ( <i>biomedicine study programme</i> )	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.
Zoology	
Environmental Science	The applicant will briefly present his/her previous education and results. A short presentation of the dissertation topic follows and the interview will continue on this topic and also including more general questions regarding the environmental sciences. The commission will conduct the interview in English.
Physical Geography and Geoecology	The candidate prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following: 1) summary of previous scientific activities 2) brief presentation of the doctoral project The committee assesses the candidate's overall motivation, their language abilities, previous scientific results, quality and feasibility of the doctoral project.
Geoinformatics, Cartography and Remote Sensing	The candidate prepares a written presentation (max 5,000 characters) and an approximately 10-minute oral presentation on the following: 1) summary of previous scientific activities 2) brief presentation of the doctoral project The committee assesses the candidate's overall motivation, their language abilities, previous scientific results, quality and feasibility of the doctoral project.