

# Doctorate in Life Sciences from the Faculties of Medicine and Science

Specializations in Molecular Biosciences, Ecology and Evolution, Genomics and Digital Health, Physics of Biology, Biomedical Sciences, Pharmaceutical Sciences

## Regulations

### Article 1 - Introduction

1. The Faculties of Medicine and Science jointly award the PhD in Life Sciences. The French name of the degree is: Doctorat ès sciences en Sciences de la vie des Facultés de médecine et des sciences. This is a program of advanced study. This doctorate is accompanied by a specialization. The specializations correspond to the different doctoral programs (as listed below) of the Life Sciences doctoral school.
2. The specializations are in Molecular Biosciences, Ecology and Evolution, Genomics and Digital Health, Physics of Biology, Biomedical Sciences, and Pharmaceutical Sciences. The French names of the specializations are: Biosciences moléculaires, Ecologie et évolution, Génomique et santé numérique, Physique du vivant, Sciences biomédicales et Sciences pharmaceutiques. The specialization is indicated on the diploma.
3. The doctoral programs associated with the specializations are: Molecular Biosciences, Ecology and Evolution, Genomics and Digital Health, Physics of Biology, Biomedical Sciences, Pharmaceutical Sciences. The functioning of the doctoral school and its programs is defined by its statutes.
4. The present study regulations are subject to recommendations from the College of the Professors of the two Faculties and to approval by the Faculty Council of the two Faculties, then to final adoption by the Rectorate. Any modification or deletion of these study regulations must follow the same procedure. The study regulations are published by the Faculty of Science and by the Faculty of Medicine on their websites.
5. This program operates in complete compliance with the principles of the University's Charter of Ethics and Deontology and of the charter of the Doctorate in Life Sciences. Thesis directors and directors of each doctoral program are responsible for maintaining a climate of respect, confidence, and scientific integrity during the years in which the students develop their doctoral projects. They must keep themselves informed regarding measures developed by the University for prevention of abuses, in particular of a sexist nature or towards minorities.

### Article 2 - Organization

1. The doctoral training is managed by the Council of the Doctoral School in Life Sciences.
2. The Council of the Doctoral School comprises an Associate Dean representing each of the Faculties, designated by the respective Dean's Offices, the directors of each of the doctoral programs, and two doctoral students representing each of the Faculties (students currently pursuing a doctorate, designated by the respective Dean's Offices, on proposal of current doctoral students). The term of the mandate of the members of the Council is based on the term of the mandates of the doctoral program directors, specifically 4 years, renewable once, except for the students, whose mandate is 2 years, renewable once.

3. The directors of the doctoral programs manage their doctoral programs, provide recommendations on requests for equivalencies, validate the composition of Thesis Advisory Committees (TACs), and provide recommendations on thesis defense proposals based on the thesis submitted by the doctoral student and the thesis report (Article 11.4).
4. The Council of the Doctoral School ensures the coherency between the different doctoral programs, votes on the creation, merging, separation, or dissolution of said programs, and ratifies the nomination of program directors.

### **Article 3 - Structure of the doctoral training**

1. The doctorate is pursued in the framework of the Doctoral School in Life Sciences, following the curriculum of the doctoral program associated with the specialization. These curricula specify the courses and activities for which ECTS (European Credit Transfer and Accumulation System) credits must be earned.
2. The doctorate includes a research project, in the specialization concerned, which results in a preliminary report and oral examination during the first year that are evaluated by the thesis advisory committee – TAC - (Article 7), the drafting of a thesis, and a public oral defense.
3. This research project is accompanied by complementary theoretical and/or practical training, called the “doctoral training”, associated with the different specializations. This training corresponds to a total of 20 ECTS credits, regardless of the specialization. The credits obtained during the doctoral training must be earned no later than the end of the 3rd year of studies, and in all cases prior to the thesis defense, on pain of elimination.
4. Additionally, the thesis director may require the doctoral student to complete other courses, seminars, and advanced training programs as co-requisites. These complementary elements shall not exceed a total of 20 ECTS credits. They must be completed no later than the end of the 2nd year of studies, on pain of elimination.
5. The Dean’s Office of the Faculty to which the student is attached specifies, in the admission letter, the co-requisites tied to the doctoral training that the student must complete, any other courses, seminars, or advanced training programs required by the thesis director, the total number of ECTS credits to be obtained, and the deadlines for obtaining them, on pain of elimination.

### **Article 4–Enrollment**

Applicants must meet the general enrollment requirements of the University of Geneva.

### **Article 5 - Admission and Registration**

1. Applicants eligible for admission to the doctorate in life sciences:
  - i) Are holders of a Master’s degree or a degree judged equivalent from an institution of higher education in Switzerland or abroad that is recognized in the field of the specialization applied for, and whose training included an internship in experimental research a) validated by a written report graded by the concerned academic institution, and b) with a duration of an entire semester.
  - ii) Succeeded on the selection procedure mentioned in Article 5.2
  - iii) Have been accepted by a thesis director.
2. Admission is based on an application. The application file comprises a CV, at least two letters of recommendation, a cover letter, and copies of secondary and university diplomas and transcripts. Applicants must also produce an attestation proving that they have the equivalent of a B1 competency level (Common European Framework of Reference for Languages) in the English language. Only the best applications are retained, and students whose applications have been

retained are invited to give a scientific presentation followed by questions and answers. Based on these criteria, admission decisions are pronounced by an advisory committee composed of professors and laboratory directors that evaluates the different candidates. The thesis director may then propose a thesis project to the admissible candidates of his or her choice.

3. Students holding a different degree than those indicated in Article 5.1.i above may apply for this doctorate. To that end, they must submit an equivalency request for their degree. This request will be examined as stipulated in the conditions set down in Article 5.4 below.
4. The Dean's Office of the Faculty to which the applicant is applying shall decide on the equivalence of the degrees based on the recommendation of the director of the doctoral program concerned. The directors of the doctoral programs assess the equivalency requests for degrees partly on the basis of the connection between the scientific field of the prior training of the student and his or her thesis project, and partly on the basis of the student's aptitudes for research developed during the final project for a Master's degree or an equivalent degree with an experimental research internship at least a full semester in length, validated by a written report and graded by an academic institution.
5. Candidates for a doctorate in Life Sciences will be required to complete their research project under the authority of a thesis director in a research group at the Faculty of Medicine or the Faculty of Science.
6. The director of a given doctoral program, in agreement with the thesis director, may require supplemental co-requisites, depending on how closely the scientific field of the student's prior training is related to his or her thesis project.
7. Furthermore, for registration as a doctoral candidate, a thesis direction attestation duly signed by the thesis director and the director of the doctoral program concerned is required. It must comprise:
  - i) the academic title and affiliation of the thesis director and, if applicable, the thesis co-director;
  - ii) the specialization of the candidate's target doctorate;
  - iii) any examinations in addition to those required for the doctoral program (co-requisites);
  - iv) equivalencies awarded in the framework of the doctoral program;
  - v) for information purposes, the sources and origins of the candidate's financing.

This attestation presupposes a positive recommendation from the director of the doctoral program concerned regarding the request for acceptance and equivalencies. If applicable, it can stipulate required co-requisites.

8. The Dean's Office of the host Faculty evaluates the conformity of the elements in the attestation and rules on the application for admission. The admission decision will indicate, where applicable, required co-requisites, the number of credits to be earned, and the deadlines for obtaining them, on pain of elimination.
9. Admitted candidates are enrolled at the University of Geneva throughout the entire period of their doctoral training. They are registered at the host Faculty of their thesis director.

#### **Article 6 – Thesis direction**

1. Thesis work is carried out under the direction of a director who is a Professor or a Research and Teaching Associate at the Faculty of Medicine or the Faculty of Science. In the case of a Research and Teaching Associate, the approval of the College of the Professors of the Department or Section concerned is required, and furthermore a Professor from the Department or Section with which the Research and Teaching Associate is affiliated must be part of the thesis jury.
2. The thesis director must hold a doctorate in medicine or in the sciences.
3. Professors and Research and Teaching Associates have the right to refuse to direct the thesis of

an admissible candidate.

4. Co-direction takes place in the following conditions:
  - a) the request for co-direction is submitted during the first year of the thesis, and applies in the following cases:
  - b) if the thesis is being conducted at the Faculty of Medicine or the Faculty of Science and the director requests co-direction. The request must be co-signed by the director of the Department or the head of the Section concerned, approved by the Dean's Office (or its delegate) of the student's host Faculty, and meet the following criteria:
    - i) the co-director must hold a doctorate and have pertinent postdoctoral experience,
    - ii) the co-director, whether or not a member of one of the two Faculties, must be deeply involved in the direction of the thesis, monitoring progress at least once per semester,
  - c) if the thesis director does not hold a doctorate (PhD) in the sciences or an MD-PhD. A co-director, holder of a PhD or MD-PhD, must be designated. The co-director must be a Professor or a Research and Teaching Associate. If a Research and Teaching Associate, the nomination process follows the same rules as for nomination to the role of thesis director. In certain exceptional situations where a researcher who does not hold a PhD or MD-PhD has demonstrated outstanding scientific qualities, engages in research as a primary activity (> 40%), has already co-supervised or supervised a minimum of three science theses (PhD), and regularly obtains competitive funding, typically from the Swiss National Science Foundation, to support his or her research, he or she may request a waiver of this rule. Such a waiver must be supported by the Council of the Doctoral School and validated by the Dean's Offices of each of the Faculties.
  - d) If, exceptionally, the thesis is undertaken outside the Faculties of Medicine and Science and the department concerned has authorized a thesis director from outside these Faculties, a co-director must be designated by the department in question. Co-direction must meet the following criteria:
    - i) The co-director must be a Professor or a Research and Teaching Associate with a doctorate in the sciences. If a Research and Teaching Associate, the nomination process follows the same rules as for nomination to the role of thesis director.
    - ii) The thesis project is the subject of an agreement between the concerned parties from the beginning of the project, as indicated in the thesis attestation,
    - iii) The thesis project's progress must be followed by the co-director,
    - iv) For the Faculties of Medicine and Science, the co-director is the academic and scientific guarantor of the thesis.
5. If the thesis director decides to no longer direct the thesis, in the absence of a definitive failure of the candidate at the oral exam set forth in Article 7, the candidate shall no longer be registered for the doctorate in Life Sciences because he or she no longer fulfils the conditions of Article 5.7. In this case, he or she is not considered to have been eliminated from the doctorate in Life Sciences.
6. The thesis topic is chosen in agreement with the thesis director. In the event of the departure of the thesis director or co-director, if possible, the Dean's Office of the host Faculty, after consultation with the Council of the Doctoral School, will make every effort to allow the doctoral student to finish his or her thesis at the University of Geneva within the prescribed deadlines.

#### **Article 7 - Doctoral examination**

1. To earn the doctorate, an oral exam is required in addition to earning the course credits required for the doctoral training concerned and, if applicable, credits for other courses, seminars, and advanced training set forth in Article 3 (co-requisites), the thesis project, and its oral defense.
2. The oral examination must take place at the end of the first year. If the doctoral student has not taken the exam after 15 months, he or she is eliminated from the doctoral program.

3. The oral examination covers general disciplinary knowledge, the progress made by the doctoral student on research projects, and the thesis project.
4. The oral examination is assessed by the thesis advisory committee (TAC).
5. The TAC comprises a minimum of 2 members, and if applicable the thesis co-director, approved by the director of the doctoral program concerned. In principle, the members of the TAC are Professors or Research and Teaching Associates, and must hold a doctorate. At least one of the members must hold a doctorate in the sciences. At least one of the members must be from a department other than that of the doctoral student. The thesis director, and if applicable the thesis co-director, participate in the TAC in an advisory capacity.
6. In preparation for the oral examination, the doctoral student submits to the TAC members a written report on the progress made on research projects and the thesis project. The examination begins with an oral presentation by the doctoral student, followed by a series of questions.
7. After having heard independently from the student and the thesis director (and, if applicable, the thesis co-director), the TAC, in their absence, produces a report assessing:
  - i. the scientific knowledge acquired by the student, in general and more precisely in connection with his or her project,
  - ii. the quality of the thesis project,
  - iii. the quantity and quality of the work produced by the student to achieve prescribed objectives,
  - iv. the specific strengths and weaknesses of the student in relation to his or her thesis project,
  - v. the quality of the interactions between the student and his or her thesis director (and thesis co-director if applicable),
  - vi. and delivers an assessment report, signed by the members of the TAC, the doctoral student, the thesis director, and the thesis co-director (if applicable).
8. A positive assessment report permits the doctoral student to pursue his or her thesis. If the report is negative, the examination can be taken a second and final time before the end of the first 18 months. If the doctoral student does not make the second attempt, or if he or she fails on the second attempt, he or she is eliminated from the doctorate.

#### **Article 8 - Assessments by the TAC during studies**

Further meetings between the doctoral student and the TAC for feedback on the progress made are encouraged. The TAC may be convened at the request of the doctoral student, the thesis director and/or co-director, or the director of the doctoral program, for questions related to the scientific project or the conditions in which the project is progressing. The TAC is required to meet with the doctoral student and the thesis director (and, if applicable, the thesis co-director), for any request for an extension of the length of studies (see Article 9).

#### **Article 9 - Length of studies**

The length of studies may not exceed 10 semesters unless an extension is granted by the Dean's Office of the doctoral student's host Faculty on recommendation of the TAC and the director of the doctoral program concerned. The directors of the doctoral programs shall agree on criteria for the assessment of requests for extensions.

#### **Article 10 - Composition of the thesis jury**

For the defense, the thesis director and the thesis co-director constitute the thesis jury, composed of at least three members, or four in the case of co-direction, meeting the following criteria:

- i) all members of the jury must hold a doctorate,
- ii) the thesis director, and co-director, if applicable, are members of the jury.
- iii) one member of the jury belongs to the doctoral program concerned,
- iv) one member of the jury is external to the University of Geneva and not directly involved in the thesis project,
- v) preferably, one member of the jury belongs to the other Faculty than the one at which the doctoral student is registered,
- vi) at least one member of the jury, not directly involved in the thesis project, must hold a doctorate in the sciences.

### **Article 11 - Writing and defending the thesis**

1. The thesis shall be written in English. A different language may be authorized by the jury. An abstract in French, one to two pages in length, shall be appended to the text, regardless of the language in which the thesis is written.
2. Theses are examined and defended based upon a typewritten manuscript. It is submitted to the members of the jury in a printed version and/or electronically, according to their choice.
3. A collection of original publications, if sufficiently interesting and recognized as such by the thesis jury, can constitute the basis of a doctoral project. These publications may in no case represent, on their own, the thesis itself. They will always be accompanied by a substantive text designed to present them in a coherent fashion and to justify the relevance of their inclusion. Developments not included in the publications themselves are expected. The thesis must contain a broad introduction to the thesis topic, connections between each publication, and a deep, global discussion of the results obtained.
4. To be defended, the thesis must first be submitted to the thesis director, and, if applicable, the thesis co-director, and also to the members of the jury for approval and to permit the drafting of the thesis report by the thesis director. The thesis, the thesis report approved by all the jury members and that concludes that the thesis can be defended, as well as the chosen jury, are submitted for the approval of the director of the doctoral program concerned. The printed version of the thesis must be accompanied by an electronic version.
5. At least fifteen business days before the scheduled date of the thesis defense, the director of the doctoral program concerned must provide to the Dean's Office of the doctoral student's host Faculty, a copy of the thesis and the thesis report, the jury's composition and its approval.
6. At the public defense, the thesis is assessed by the jury. The jury assesses the doctoral student's scientific research and the quality of the written thesis and the oral defense. The possible assessments are "accepted" and "refused". If the oral defense does not permit acceptance of the thesis, the defense may take place a second time. In this case, and still respecting the deadline for maximum length of studies set forth in Article 9 above, the doctoral student will first be required to complete the written thesis in accordance with the thesis jury's observations, then again submit his or her thesis as described in Article 11.4-5.
7. The printing of the thesis and its submission may only be carried out with the authorization of the Dean's Offices of the two Faculties (publication approval and thesis number) and if the thesis (written thesis) conforms to the directives for doctoral students, available at the student offices of the Faculties of Medicine and Science.

### **Article 12 - Granting of the degree**

1. Successful completion of the doctoral training as defined in the above Articles results in the granting of the *"Doctorate in Life Sciences from the Faculties of Medicine and Science of the University of*

*Geneva*” along with the specialization set forth in Article 1.

2. The diploma is signed by the Rector, the Secretary General of the University, and by the Deans of the Faculty of Medicine and the Faculty of Science.
3. The degree of doctor is conferred upon the doctoral student after he or she has submitted his or her thesis in paper and electronic format as stipulated in the University directives, specifically those regarding the submission and dissemination of scientific documents in the University of Geneva's open archive.

### **Article 13 - Fraud and plagiarism**

1. Any fraud, any plagiarism, or any attempted fraud or plagiarism duly documented by the College of the Professors of the section or the department concerned of the host Faculty results in the failure of the assessment concerned.
2. The College of the Professors of the section or department concerned may also determine that the failure of the assessment in question shall be definitive.
3. The Dean's Office of the host Faculty shall report to the University's Disciplinary Council:
  - i) if it is determined that a disciplinary hearing is warranted;
  - ii) in all cases, when the failure of the assessment concerned is definitive and will lead to the student being eliminated from the doctorate in life sciences.
4. Beforehand, the president of the College of the Professors of the section or department concerned, for the college, or the Dean's Office of the Faculty concerned, must have heard the case of the doctoral student, and the doctoral student has the right to examine his or her file.

### **Article 14 - Elimination**

1. Candidates are definitively eliminated from the doctorate in life sciences:
  - a) if they have definitively failed the doctoral examination assessed by the thesis advisory committee (Article 7);
  - b) if they have not successfully completed the co-requisites required at the moment of their admission (definitive failure or failure to report to assessments) within the prescribed deadline;
  - c) if they have not successfully completed the examinations of the chosen doctoral program within the prescribed deadline (Article 3);
  - d) if they have definitively failed their thesis project (written thesis and oral defense);
  - e) if they have not successfully completed their doctorate within the maximum length of studies set forth in Article 9 and have not received an extension.
2. Cases of fraud, plagiarism, or attempted fraud or plagiarism shall be addressed by the relevant rules and regulations.
3. The Dean of the host Faculty shall pronounce the elimination.

### **Article 15 - Appeals Procedures**

1. Any decision made in application of these study regulations may be appealed to the deciding body within 30 days of the day following the announcement of the decision.

2. The Rules pertaining to Appeals at the University of Geneva (RIO-UNIGE) of 16 March 2009 shall apply.
3. Decisions rendered on an appeal may be appealed to the administrative chamber of the Court of Justice within 30 days of the day following the announcement of the decision.

#### **Article 16 - Entry into force and transitory provisions**

1. The present study regulations for the Doctorate in Life Sciences from the Faculties of Medicine and Science shall enter into force effective 1 July 2018.
2. These joint study regulations are added to the study regulations for the doctorate of the Faculty of Science, and do not replace them.
3. The new study regulations for the Doctorate in Life Sciences from the Faculties of Medicine and Science shall apply from its entry into force to all new students beginning their studies in this program after their entry into force.
4. New students who opt for a doctorate from the Faculty of Science, in accordance with the study regulations for the doctorate from the Faculty of Science, are subject to those regulations and are not concerned by the present study regulations.
5. Students currently studying for a doctorate in Biochemistry, Biology, or Pharmaceutical Sciences from the Faculty of Science, shall be subject to the present study regulations from the moment of their entry into force. However, they may choose to receive a doctoral diploma with the older degree title, conditional upon expressly requesting this from the Dean's Office of the Faculty of Science, in writing, no later than 6 months after the present regulations enter into force. In this case, these students shall remain subject to the study regulations for the doctorate from the Faculty of Science, which shall govern their curriculum of studies.
6. Dispositions concerning the deadlines set forth in Article 7.2 and Article 7.8 for students currently studying for a doctorate at the moment of the entry into force of the present regulations, and who are subject to them in application of Article 16.5 above: These deadlines apply to students subject, at the moment of entry into force of the present study regulations, to the regulations of 1 January 2017 for doctorates from the Faculty of Science in Biochemistry and Biology, and who are registered for the program "University of Geneva International PhD program in Life Sciences" of the Faculty of Science. These deadlines do not apply to other students, including those in the doctoral program "Biologie-Médecine", who have already begun their program of study for the doctorate at the Faculty of Science and who are not yet registered for their doctoral examinations as stipulated in the older regulations of the Faculty of Science that governs their studies at the moment of the entry into force of the present regulations; however, the doctoral examinations must also be successfully completed by that category of student no later than 18 months after the entry into force of the present regulations.
7. The director of the program concerned shall rule on equivalencies of studies for students currently studying for a doctorate in Biochemistry, Biology, or Pharmaceutical Sciences from the Faculty of Science at the moment of entry into force of the present study regulations and who, as stipulated in Article 16.5, are subject to the present study regulations.

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Proposal accepted by the College of the Professors of the Faculty of Science on 22 January 2018 (62 in favor, 0 opposed, 2 abstentions)



Proposal accepted by the extraordinary faculty council of the Faculty of Science on 10 January 2018  
(13 in favor, 0 opposed, 6 abstentions)

**Translation notice:** This document is a translation of the “Règlement” for the “Doctorat ès sciences en Sciences de la vie des Facultés de médecine et des sciences”. English is not an official language of the Canton of Geneva. This translation is provided for information purposes only and has no legal force. This translation was produced by the Rectorate of the University of Geneva and is an accurate equivalent of the original French text. The French text remains authoritative.



**UNIVERSITÉ  
DE GENÈVE**

RECTORAT

A handwritten signature in blue ink, appearing to read 'S. Berthet'.

**Dr. Stéphane BERTHET**  
Secretary General  
Legal representative