

PROGRAM OF DOCTORAL STUDIES

A doctoral study program includes **the advanced university training program** and **the scientific research program**.

The advanced university training program, containing courses common to all doctoral students enrolled in that year, aims to familiarize the doctoral student with the most advanced scientific results in the field/fields in which he will carry out his own research activity and to correlate them with the basic elements assimilated in the first two levels of university studies (bachelor plus master), so that the doctoral student can formulate, based on the guidance of the doctoral supervisor, an own research project on the topic on which he enrolled for the PhD.

The advanced university training program is carried out during the first year of doctoral studies.

The advanced university training program consists of: courses, personal study based on a fixed bibliography, participation in seminars or laboratory activities and possibly other similar activities that the Doctoral School Council considers appropriate to its profile.

The educational offer for the advanced training program within the Institute of Biology Bucharest is:

1. Ethics and academic integrity - course coordinator Acad. Octavian Popescu - semester I - 15 ECTS credits - compulsory course
2. Management of research projects - course coordinator Acad. Octavian Popescu - semester I - 15 ECTS credits - compulsory course
3. General research methods and methodology of elaboration of scientific papers - course coordinator Acad. Octavian Popescu - semester I - 15 ECTS credits
4. Study of structural and functional biodiversity of microorganisms - course coordinator CS I Dr. Cristina Purcărea - semester II - 15 ECTS credits
5. Molecular biology of the cell – course coordinator CS I Norica Nichita – semester II – 15 ECTS credits
6. Flora of Romania – course coordinator CS I Sorin Ștefănuț - second semester - 15 ECTS credits
7. Protection of peat bogs – course coordinator CS I Sorin Ștefănuț - second semester - 15 ECTS credits
8. General ecology - course coordinator CS II Marilena Onete – second semester - 15 ECTS credits
9. Nature protection - course coordinator CS II Marilena Onete - second semester - 15 ECTS credits

The advanced university training program is considered to have been completed upon the accumulation by the doctoral student of 60 ECTS credits/year from the forms of advanced university training graduated and ends with the support by the doctoral student of the progress

report and the scientific report, elaborated by the doctoral student in the next year of studies and includes a detail of the issues and methods considered for his doctoral activity and the realization of the doctoral thesis.

The evaluation of progress reports, scientific reports and specific skills formed within the advanced university training program is done by the guidance committee, which includes the doctoral supervisor.

Scientific Research Program

The main objective of the individual scientific research program is the precise formulation, in accordance with the most current methods used in the scientific field addressed, of a set of scientific problems correlated with the theme of the respective doctoral program and obtaining results, aspects, new interpretations on those scientific problems.

The scientific research program takes place within the Doctoral School to which the doctoral student was admitted and involves the participation of the doctoral student in one or more scientific projects established by the doctoral supervisor within the institutes or research centers subordinated to the Romanian Academy and/or partner institutions, according to the Regulation for the Organization of Doctoral University Studies and the procedures of the respective Doctoral School approved by the Doctoral School Council and the provisions of the work plan of the chosen Doctoral Study Program.

Depending on the provisions adopted by the Doctoral School Council and those within a specific doctoral study program, the respective scientific research program is subject to periodic evaluations, based on progress reports and related scientific reports. The role of these evaluations along the way is to analyze the feasibility of the proposed objectives and the possible need for changes in strategy or even research direction. Their result may result in changes to the respective doctoral study program.

Completing the scientific research program involves obtaining a number of 180 transferable study credits (ECTS), divided by years of study, as follows:

- year II – 60 credits (for scientific research activity, for promoting progress report I and scientific report I);
- year III – 60 credits (for scientific research activity, for promoting progress report II and scientific report II);
- year IV - 60 credits (for scientific research activity, for promoting progress report III and scientific report III, for the report on the achievement of dissemination indicators and for preparing the doctoral thesis and defending it in front of the guidance committee).

Throughout the scientific research period, in addition to the associated direct research and information activity, the doctoral student has the obligation to disseminate the results of doctoral research by writing scientific papers and participating with communications in national and international scientific conferences.

Completion of doctoral studies

The activity of the doctoral student within a Doctoral Studies Program ends with the writing and public defense of the doctoral thesis in front of a Commission.

The doctoral thesis contains a detailed description of the studied issues, as well as of the doctoral student's own results and conclusions obtained in his/her research activity under the guidance of the doctoral supervisor, on the topic that was the subject of the doctoral study program.

The doctoral thesis is written by the doctoral student, under the guidance of the doctoral supervisor and must have a high degree of originality, the references to existing texts must be clearly delimited with the precise indication of the original text. It must clearly highlight the new, original aspects of the results and/or conclusions of the doctoral student author in relation to the situation of the field of study, as it is presented in the specialized literature.

The main original elements presented in the doctoral thesis must be the subject of papers sent for publication in the best rated sources of information in the scientific field in which the topic of the doctoral thesis belongs.

The doctoral thesis is written in the Romanian language or in a language of wide international circulation, as provided in the respective doctoral study program.

The doctoral student is the author of the doctoral thesis and assumes the correctness of the data and information presented in the thesis, as well as of the opinions and demonstrations expressed in the thesis. According to the principle of academic freedom, the author is free to express his conclusions without any ideological or other restrictions.

The publication of the doctoral thesis, under the law, is done under the name and surname of the doctoral student and of the doctoral supervisor.

After the issuance of the doctoral degree, the doctoral thesis in printed format is archived at the library of the institutes of the Romanian Academy, with a permanent term.

Following obtaining the title of doctor, the Academy Romanian confers the diploma of doctor of sciences, which mentions the field in which the doctoral study program was organized.