

General educational plan (program of study) of the PhD program at IICT – BAS with a duration of up to 5 years

First year (1-2 semesters)

1. Language Preparation Course

2. Computer Skills Course – Choice of [IT Courses](#)

- [LaTeX Basics](#)
- [Data Analytics with R](#)
- [Presentation skills](#)
- [Photoshop](#)
- [GIMP](#)
- [MATLAB](#)
- [Statistical data analysis](#)
- [MS Excel](#)
- [Transfer of scientific knowledge to society through the free electronic encyclopedia Wikipedia](#)

3. Individual research project 1

- Formulation of a research topic
- Literature review and methodological preparation
- Initial results and analyses

4. Seminar on

- Presentation and discussion of current research and projects
- Critical analysis of scientific articles and reports

Second year (3-4 semester)

5. Specialized courses at the Central Training Center of the Bulgarian Academy of Sciences (minimum 2 courses are selected) from [the Specialized courses](#) at the Central Training Center of the Bulgarian Academy of Sciences

- *The courses concerning the doctoral program are listed*

6. Individual research project 2

- Research and experiments
- Analysis and interpretation of results
- Preparation of a dissertation

7. Seminar on

- Presentation and discussion of individual research projects
- Interdisciplinary discussions and collaboration

Third year (5-6 semester)

8. General basic preparation according to the synopsis for an exam in a basic specialized subject

- Preparation of a synopsis on the topic of the dissertation
- Synopsis exam: 2 written questions and 2 - 4 oral questions

9. Individual research project 3

- Research and experiments
- Analysis and interpretation of results
- Preparation of a dissertation

10. Publications and presentations

- Preparation of scientific articles for publication
- Presentation of the results of international conferences

11. Ethics and professional development

- Scientific ethics and integrity
- Publication of scientific papers
- Participation in conferences and seminars
- Career development and academic opportunities

12. Seminar on

- Presentation and discussion of individual research projects
- Interdisciplinary discussions and collaboration

Fourth year (7-8 semester)

13. Individual research project 4

- Research and experiments
- Analysis and interpretation of results
- Preparation of a dissertation

14. Publications and presentations

- Preparation of scientific articles for publication
- Presentation of the results of international conferences

15. Seminar on

- Presentation and discussion of individual research projects
- Interdisciplinary discussions and collaboration

Fifth year (9-10 semester)

16. Individual research project 5

- Finalization of research and experiments
- Analysis and interpretation of results
- Formulation of general conclusions and contributions
- Preparation of a dissertation

17. Publications and presentations

- Preparation of scientific articles for publication
- Presentation of the results of international conferences

18. Presentation of the work done on the dissertation

- Presentation of published results
- Further clarification of the topic of the dissertation (no later than 3 months before the date of the meeting of the section for the preliminary discussion)

19. Defense of the dissertation (up to 5 years after the expiration of the doctoral program)

- Preparation of an abstract
- Preparation and presentation of the dissertation before a scientific jury.
- Answers to questions and criticism from members of the committee

This program provides doctoral students with the necessary knowledge and skills to conduct independent research in the field of and their successful application in various scientific and practical contexts.