

**General curriculum (program of study) of PhD program at IICT – BAS with a duration of up to 4 years**

**First year (1-2 semesters)**

**1. Language Training 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 ongoing research and projects
- Critical analysis of scientific articles and reports

**Second year (3-4 semester)**

**5. Specialized courses at the Center Training Committee 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. 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

**7. Individual research project 2**

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

**8. Seminar on .....**

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

**Third year (5-6 semester)**

**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**

- Finalization of 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. 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)

#### **16. 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.**