#### General educational plan (program of study) of the PhD program at IICT - BAS

First year (1-2 semester)

1. Language Preparation Course

### 2. Computer Skills Course – Choice of <u>IT Courses</u>

- LaTeX Basics
- Data Analysis with R
- <u>Presentation skills</u>
- <u>Photoshop</u>
- <u>GIMP</u>
- <u>MATLAB</u>
- <u>Statistical data analysis</u>
- <u>MS Excel</u>
- <u>Transfer of scientific knowledge to the public through the free electronic encyclopedia Wikipedia</u>

#### 3. Individual research project 1

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

## 4. <u>Specialized courses</u> at the Central Center of BAS (at least 2 courses are selected) from <u>Specialized courses</u> at the Central Center of BAS

- The courses concerning the doctoral program are listed
- 5. Seminar on .....
  - Presentation and discussion of current research and projects
  - Critical analysis of scientific articles and reports
- 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

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

- 7. Individual Research Plan 2
  - Research and experiments
  - Analysis and interpretation of results

• Preparation of a dissertation

### 8. Ethics and professional development

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

#### 9. Seminar on ..... 2

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

# Third year (5-6 semester) (for PhD students part-time and self-study until the end of the doctoral period)

#### 10. Individual Research Plan 3

- Finalizing research and experiments
- Analysis and interpretation of results
- Preparation of a dissertation

#### 11. Publications and presentations

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

#### 12. Presentation of the work done on the dissertation

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

#### 13. Defense of the dissertation (up to 5 years after the expiration of the doctoral degree)

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

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.