#### 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 IT Courses
  - LaTeX Basics
  - Data Analysis with R
  - Presentation skills
  - Photoshop
  - GIMP
  - MATLAB
  - Statistical data analysis
  - MS Excel
  - Transfer of scientific knowledge to the public 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. <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 project 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 .....

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

## Third year (5-6 semester)

# 10. Individual research project 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