

**English-language  
Education Programme in Computer Science  
in the discipline of Computer Science  
at the Doctoral School of Exact and Natural Sciences**

**I**

**General provisions**

1. The education programme in Computer Science has been established according to the Act of 20 July 2018 on the Law on Higher Education and the guidelines applicable at the Jagiellonian University in Kraków.
2. The education programme leads to the achievement of level 8 learning outcomes as defined according to the Polish Qualifications Framework.
3. The education programme lasts eight semesters.
4. English is the language of instruction for this education programme.
5. The detailed requirements and the admission criteria to the programme are defined within the terms and conditions for admission as approved by the Senate.
6. Within 3 months from the date of commencement of education, a doctoral student shall be appointed a supervisor or supervisors in the mode provided for in the Doctoral School Regulations.
7. Within 12 months from the date of commencement of education, a doctoral student is to submit an Individual Research Plan to the co-ordinator of the education programme for approval. The Individual Research Plan covers a period equal to the duration of the education programme and specifies the deadline for submitting the doctoral dissertation.
8. In the course of the education programme, a doctoral student shall be required to obtain, in accordance with the schedule and within the courses approved by the co-ordinator of the education programme, a minimum of 40 ECTS credits, of which at least 24 ECTS credits shall be completed by the end of the fourth semester.
9. The detailed rules on achieving learning outcomes and the manner of their assessment are specified in the syllabuses of the individual courses.

**II**

**Professional traineeships**

1. Professional traineeships shall take the form of conducting classes with students as well as assisting in this process. Professional traineeships can also take the form of conducting activities with the purpose of popularizing science, or in any other form determined by the education programme co-ordinator.
2. The traineeships can also be carried out in the form of an internship in a company, a foundation, etc. (from the third semester onwards).
3. The rules of the traineeships for doctoral students studying on the Computer Science programme are determined by the education programme co-ordinator.
4. The number of hours allocated to the traineeship programme must not exceed 60 hours per academic year, of which a minimum of 30 hours in the form of conducting classes.

### **III**

#### **Mode of study and research progress assessment**

1. The supervisor shall supervise the doctoral student's programme of study and the individual research plan.
2. Annually, but no later than by 30 September, the PhD student shall submit to the education programme co-ordinator a report on the implementation of his/her individual research plan as consulted with the supervisor/s.
3. The education programme co-ordinator evaluates the implementation of study and research progress on the basis of the PhD student's report, information from the supervisor/s, and the report from the Electronic University System for Study Support.
4. Changing an individual research plan, in particular, changing or postponing some of the doctoral student's duties to another date, requires the approval of the education programme co-ordinator.
5. The education programme co-ordinator may decide to accept as part of the performance of duties (with the appropriate allocation of ECTS credits) courses or classes not specified within the education programme.
6. By the end of the fourth semester, the PhD student shall be subject to a mid-term assessment before the committee appointed by the Research Board Discipline. The mid-term assessment date is established by the education programme co-ordinator.
7. 30 days before the scheduled committee meeting, the PhD student shall submit to the education programme co-ordinator a written report on the implementation of his/her individual research plan. The report must be approved by the supervisor before submission.
8. Members of the committee and the PhD student, in the parts to which s/he was invited, participate in the meetings of the committee conducting the mid-term assessment.

### **IV**

#### **Schedule**

## SCHEDULE FOR THE EDUCATION PROGRAMME IN COMPUTER SCIENCE

DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES EDUCATION PROGRAMME: TECHNICAL COMPUTER SCIENCE					
Item (name of the course)	Objective, Description	PQF*	Semester	ECTS	Limit
<b>OBLIGATORY COURSES WITHIN THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES (MINIMUM 25 ECTS CREDITS; WITH A C1 LANGUAGE CERTIFICATE 21 ECTS CREDITS)</b>					
Foundation seminar	Participation in a research seminar devoted to the recent achievements and research results in a given discipline. Assessment: <b>credit depending on active participation in a seminar</b>	P8S_WG P8S_UW P8S_KK	I-VIII	2 for 30 hours	12 ECTS minimum
Specialist courses	At least one course/lecture selected by the doctoral student: presentation of the foundations or current research problems of a given discipline. Assessment: <b>exam or other form determined by the lecturer</b>	P8S_WG P8S_UW	I-IV	6 for a lecture with classes/labs 3 for a lecture without classes/labs	6 ECTS minimum
Doctoral seminar I	Preparation for research work. Assessment: <b>credit</b>	P8S_UK P8S_KR	II	1	1 ECTS
Doctoral seminar II	Preparation for research work. Presentation of PhD student's research. Assessment: <b>credit</b>	P8S_UK P8S_UO P8S_KR	IV	2	2 ECTS
English language course	English classes at C1 level (not applicable to doctoral students who hold a C1 certificate or are graduates of master studies conducted in English). Assessment: <b>exam</b>	P8S_UU	I-II	4 for 60 hours	4 ECTS
<b>ELECTIVE JOINT ACTIVITIES FOR THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES</b>					
Doctoral School Seminar	A monthly interdisciplinary seminar with English lectures led by invited researchers. Assessment: <b>credit on the basis of attendance</b>	P8S_WG, P8S_UW	I-VIII	1 a year	
Modern foreign language course	Second foreign language. Assessment: <b>exam</b>	P8S_UU	I-IV	4 for 60 hours	
Polish language for foreigners	Assessment: <b>exam</b>	P8S_UU	I-VIII	4 for 60 hours	

General knowledge development course	Course/s selected from a range of courses offered before a given academic year, e.g. philosophy, ethics, artificial intelligence, cosmology. Assessment: <b>exam</b>	P8S_WK	I-VIII	2 for each 30 hours	
Personal competence and soft skills development course	Course selected from a range of courses offered before a given academic year, e.g. career planning, managerial skills, business communication. Assessment: <b>provided in the course syllabus</b>	P8S_WK	I-VIII	2 for each 30 hours	
<b>OPTIONAL ACTIVITIES TO DEVELOP PROFESSIONAL SKILLS</b>					
Optional classes to be selected by the PhD student	Lectures (3 ECTS for 30 hours); Seminars (2-4 ECTS for 60 hours depending on a number of the PhD student's presentations); Reading (2 ECTS for studying a publication, which is equivalent to a 30-hour course); Workshops that develop soft skills and are organized by the Faculty of Mathematics and Computer Science, Faculty of Physics, Astronomy and Applied Computer Science or Faculty of Management and Social Communication.	P8S_UU P8S_WG	I-VIII	See description	
<b>PROFESSIONAL TRAINEESHIPS</b>					
In-company internship	Optional internship in a company. Assessment: <b>assessed by the education programme co-ordinator on the basis of a certificate from a company</b>	P8S_UU P8S_KO	III-VIII	1 for each 30 hours	no more than 6 ECTS
Didactic internships	Preparation for work as an academic teacher, including running classes. Assessment: <b>assessed by the education programme co-ordinator on the basis of the opinion of the person monitoring classes given by the PhD student</b>	P8S_UU P8S_UK	I-VIII	1 for 15 hours	in total no more than 8 ECTS
<b>Mandatory additional training:</b> <ol style="list-style-type: none"> <li>1. PhD students starting their education are required to complete occupational health and safety training.</li> <li>2. First Aid course (theoretical and practical part) to be carried out by the end of the 2nd semester.</li> <li>3. PhD students planning research involving vertebrate animals are required to undergo training that ends with obtaining the appropriate qualifications.</li> </ol>					

\* Polish Qualification Framework (PQF) in accordance with the Regulation of the Minister of Science and Higher Education on the characteristics of second degree learning outcomes for qualifications at the levels 6-8 of the Polish Qualifications Framework.

Conducting research for a doctorate and preparing a doctoral dissertation within the meaning of Art. 187 point 3 of the Act on Higher Education and Science of July 20, 2018, partially fulfils the implementation of all types of learning outcomes for qualifications at PQF level 8. Obtaining these outcomes is verified by the supervisor.

## **V**

### **Final provisions**

The education programme in Computer Science in the discipline of Computer Science at the Doctoral School of Exact and Natural Sciences enters into force on the day of the Resolution's adoption.