

**Mathematics**  
**in the discipline of Mathematics**  
**English - language Study Programme in**  
**Mathematics at the Doctoral School of**  
**Exact and Natural Sciences**

**I**

**General provisions**

1. The study programme in Mathematics has been developed 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 study programme leads to learning outcomes for qualifications defined as level 8, according to the Polish Qualifications Framework.
3. The study programme lasts eight terms.
4. Detailed requirements and the admission criteria are defined by the University regulations as accepted by the University Senate.
5. Within 3 months from the date of commencing the study programme, a supervisor or supervisors shall be appointed in the mode provided for in the Doctoral School Regulations.
6. Within 12 months of the date of commencing the study programme, the PhD student submits to the Head of PhD programme an Individual Research Plan. The Individual Research Plan covers a period equal to the duration of the study programme and specifies the date of submitting the doctoral dissertation.
7. By 15 October, the PhD student shall submit for approval to the Head of PhD programme a plan of implementation of her/his study programme for the given academic year. From the second year this plan is subject to the supervisor's approval.
8. During the study programme, the PhD student is required to obtain a minimum of 40 ECTS points, in accordance with the schedule and within the courses approved by the Head of PhD programme.
9. The rules on achieving learning outcomes and the manner of their evaluation are specified in the individual course syllabuses.

**II**

**Occupational internship**

1. Occupational internships programmes are realized in the form of conducting classes with students as well as assisting in this process. Occupational internships can also take the form of conducting activities with the purpose of popularizing science.
2. The internships can be implemented in the form of an internship in a company, a foundation, etc.
3. The rules of conducting didactic internships for the PhD students studying on the programme Mathematics are established by the Head of PhD programme.
4. The number of hours allocated to the internship programme must not exceed 60 hours per academic year.

### III

#### **Evaluation of study and scientific programme accomplishments**

1. The supervisor monitors the study programme implemented by the PhD student and his/her Individual Research Plan.
2. By the of 2<sup>nd</sup> and 6<sup>th</sup> term, the PhD student, submits to the Head of PhD programme, his/her report on the implementation of the study programme and Individual Research Plan. Before submission this report is evaluated by the supervisor.
3. The Head of PhD programme evaluates the implementation of the study programme and research programme on the basis of the report submitted by the PhD student.
4. Changing an Individual Research Plan, in particular changing or postponing some of the PhD student's duties to another date, requires the approval of the Head of PhD programme.
5. The Head of PhD programme may decide to accept as part of the performance of duties (with the appropriate allocation of ECTS points) courses or classes not specified in the study programme.
6. By the end of the 4<sup>th</sup> term, the PhD student shall be subject to the mid-term evaluation before a committee appointed by the director.
7. The evaluation dates are established by the Head of PhD programme.
8. 30 days before the scheduled committee meeting, the PhD student shall submit to the Head of PhD programme a written report on the implementation of the Individual Research Plan. The report must be approved by the supervisor before submission.
9. Members of the committee and the PhD student, in the parts to which s/he was invited, participate in the committee meetings conducting the mid-term evaluation.

IV  
Schedule for the study programme in Mathematics

Doctoral School of Exact and Natural Sciences Study Programme: Mathematics						
Item	Objective	Description	PQF*	Term	ECTS	Limits
<b>OBLIGATORY ACTIVITIES AT THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES (MINIMUM 25 ECTS POINTS; WITH A C1 LANGUAGE CERTIFICATE 21 ECTS POINTS)</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	1-2 for 30h	12 ECTS minimum
Specialist courses		At least one course/ lecture selected by the PhD student: Presentation of the foundations or current research problems of a given discipline. Assessment: <b>exam</b>	P8S_WG, P8S_UW	I-IV	6 for a lecture with classes 3 for a lecture without classes	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 for the PhD students who do not hold a C1 certificate or are not graduates of master studies conducted in English. Assessment: <b>exam</b>	P8S_UU	I-II	4 for 60 hours	4 ECTS

OPTIONAL JOINT ACTIVITIES FOR THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES					
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 per year	
Modern foreign language course	Second foreign language Assessment: <b>exam</b>	P8S_UU,	I-IV	4 for 60 hours	
Polish language course 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 30 hours	
Professional competence and soft skills development course	One 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 30 hours	
OPTIONAL ACTIVITIES TO DEVELOP PROFESSIONAL SKILLS					
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 publication, which is equivalent to a 30-hour course); Workshops that develop soft skills and are organised by the Faculty.	P8S_UU,P8S_WG	I-VIII	See description	

OCCUPATIONAL INTERNSHIP					
In-company internship	Optional: in an industrial company Assessment: on the basis of a company certificate; done by the Head of PhD programme	P8S_UU,P8S_KO	III-VIII	1 for each 30 hours	No more than 8 ECTS
Didactic internship	Preparation for work as an academic teacher, including running classes Assessment: <b>on the basis of an opinion of the person monitoring classes given by the PhD student</b>	P8S_UU,P8S_UK	I-VIII	8 for 150 hours	In total, no more than 8 ECTS
<p><b>Additional training:</b></p> <ol style="list-style-type: none"> <li>1. The PhD students entering their study programme are required to complete training in Health and Safety in Education by the end of the 2<sup>nd</sup> term of their studies, if they have not participated in such a course at the earlier stages of their education at the Jagiellonian University.</li> <li>2. First Aid course completed by the end of the 2<sup>nd</sup> term.</li> <li>3. The PhD students who plan research involving vertebrates are obliged to complete training to obtain appropriate licenses.</li> </ol>					

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

## V

### Final provisions

The study programme: Mathematics in the discipline of mathematics at the Doctoral School of Exact and Natural Sciences enters into force on the day of the adoption of the Resolution.