

The programme of study at the Doctoral School of Exact and Natural Sciences (short ver.)

MANDATORY CLASSES

CLASSES	1st YEAR hours/sem.		2nd YEAR hours/sem.		3rd YEAR hours/sem.		4th YEAR hours/sem.		
	I	II	III	IV	V	VI	VII	VIII	
Didactics of higher education (lecture + workshops)	15+5								
Copyright		4							
Fundamentals of Functioning in the Scientific World - workshops		26							
Research development - individual classes with a supervisor*				30					
Research seminar**	30		30		30		30		
Discipline Lecture	Astronomy: 3x30 Biological sciences: 3x30 Chemical sciences: 3x30 Physical sciences: 1x60 + 30 Computer science: 3x30 Earth and Environmental sciences: 3x30 Mathematics: 3x30								
Interdisciplinary Conference I				30					
Interdisciplinary Conference II							30		
Latest discoveries in the exact and natural sciences		15							
Teaching practice									
Astronomy	30		60		30		0		
Biological sciences	0		30		30		0		
Chemical sciences	45		45		45		45		
Physical sciences	30		60		60		30		
Computer science	30		60		60		30		
Earth and Environmental sciences	0		30		30		0		
Mathematics	30		60		60		30		

ADDITIONAL CLASSES REQUIRED BY THE DISCIPLINES

ZAJĘCIA	1st YEAR hours/sem.		2nd YEAR hours/sem.		3rd YEAR hours/sem.		4th YEAR hours/sem.	
	I	II	III	IV	V	VI	VII	VIII
Monographic lecture (depending on the discipline)***	2x15							
Faculty Seminar (Chemical Sciences)****	15							

*In particularly justified cases, an increase in the class load of up to 70h is possible. Consent is given after consultation with the head of the Unit in which the supervisor concerned is employed.

**Provided and conducted from a pool of seminars held in the academic unit, related to the department in which the dissertation topic falls. Selection in consultation with the supervisor. Credit on the basis of attendance and delivery of at least two papers throughout the study cycle, in English. In the case of the preparation of a doctoral dissertation in less than eight semesters, the hourly load is reduced accordingly with the approval of the director of the doctoral school.

***Monographic lecture(s) to be chosen from the list of lectures offered by the faculties. They do not have to meet the requirement of the PQF level 8, but are important in order to achieve relevant scientific competence in the discipline. Although they complement studies in the discipline, they are obligatory. Selection in consultation with the supervisor. The required load

of the monograph lectures is 30 hours. The total load of lecture(s) is 15h, 1 credit ECTS (Chemical Sciences) 30h, 2 credits ECTS (Astronomy, Biological Sciences, Physical Sciences, Computer Science, Earth and Environmental Sciences, Mathematics)

***For the discipline of Chemical Sciences, the Faculty Seminar is a distinctive element of education found in a large proportion of chemistry research units in Poland and around the world. Attendance at 15 lectures throughout the education cycle is required.