

Education program at the Doctoral School of Animal Sciences and Food Safety

§ 1.

1. The Doctoral School of Animal Sciences and Food Safety, hereinafter referred to as the "School", is jointly created by the Consortium's Partners, i.e. the Institute of Genetics and Animal Breeding of the Polish Academy of Sciences in Jastrzębiec, being the Coordinating Unit - Leader and the State Veterinary Institute - National Institute Research in Puławy.
2. Education at the School lasts 4 (four) years and is conducted in two disciplines: (1) animal science and fisheries (IGBZ PAN) and (2) veterinary medicine (PIWET-PIB), belonging to the field of agricultural sciences.
3. The conditions and mode of recruitment, training program, learning outcomes for qualifications at level 8 of the PRK (*Polish Qualifications Framework*) and methods of their verification are common for both Consortium Partners.

§ 2.

Education at the School includes:

- a. conducting scientific research and preparing a doctoral dissertation,
- b. acquiring and expanding knowledge in the field of scientific discipline and related disciplines in the field of agricultural and other sciences,
- c. expanding and acquiring new skills in the field of scientific discipline and related disciplines in the field of agricultural and other sciences, including the presentation of results of scientific research,
- d. acquiring social competences, useful in scientific and implementation work, and necessary for functioning and cooperation with representatives of other social groups.

§ 3.

1. Education at the School is carried out in English. In the absence of English-speaking people, the classes are conducted in Polish.
2. Education at the School includes:
 - a. **Compulsory** classes (135 h, 14 ETCS),
 - b. **Optional** classes (22 ECTS),
 - c. Scientific **seminars** (60 h, 4 ECTS),
 - d. **Non-specialization** classes (20 ECTS).
3. **Compulsory** classes include:

No.	Subject	Number of lecture hours / number of hours of practical classes	Form of examination	Number of ECTS points
1.1.	Major subject:	30	Final exam	2
1.1.1	General and molecular genetics			
1.1.2	Food toxicology and microbiology			
1.2	Specialist language course	0/30	Final exam	3
1.3	Statistical modeling in scientific research	15/15	Final exam	2
1.4	Patents and intellectual property protection	5/0	positive assessment	1
1.5	Research funding	15/0	positive assessment	2
1.6	Writing scientific articles	15/0	positive assessment	2

1.7	Ethics and law in science	5/0	positive assessment	1
1.8	Bibliometry in research work	5/0	positive assessment	1
	In total	135		14

4. **Optional** classes include:

No.	Subject	Number of lecture hours	Form of examination	Number of ECTS points
2.1	Molecular biology techniques	15	positive assessment	2
2.2	<i>In vitro</i> techniques	15	positive assessment	2
2.3	Cell and tissue imaging	15	positive assessment	2
2.4.	Fundamentals of transcriptomics, proteomics and metabolomics	30	positive assessment	2
2.5	Animal physiology	30	positive assessment	2
2.6	Bioinformatics	20	positive assessment	2
2.7	Alternative methods to animal testing used in toxicology	10	positive assessment	2
2.8	Genomic sequencing of pathogens in food and data analysis	10	positive assessment	2
2.9	Modern methods of instrumental analysis in food toxicology	15	positive assessment	2
2.10	Risk assessment in food infections	10	positive assessment	2
2.11	Risk assessment in food contamination	10	positive assessment	2
	In total			22

5. As part of **scientific seminars**, a PhD student at the School:

- presents his scientific project during the reporting session of PhD students of the School (obligatory twice during the course of education at the School) – 1 ECTS,
- participates in scientific seminars organized in IGBZ and / or PIWET-PIB – 2 ECTS,
- participates in scientific sessions, lectures, paper meetings of scientific societies, etc. – 1 ECTS

6. **Non-specialization** classes include:

	ECTS points	Maximum number of ECTS points during the course of education at the School
Managing your own research project,	2	2
Foreign scientific internship,	2	2
National scientific internship,	1	1
Participation in the B+R (<i>Research + Development</i>) project,	2	2
Active participation in the scientific conference,	1	3
Authorship of a scientific publication in the journal from the A list	4	8
Participation in activities promoting science	1	2
In total		20

7. During the 4 years of education at the School, a PhD student is obliged to accumulate at least 34 ECTS points, including at least 9 ECTS points obtained in total from passing optional classes and at least 10 ECTS points obtained in total from extra-specialized classes offered by the School.
8. Compulsory, optional and scientific seminars may be carried out as part of summer and/or winter schools.

§ 4.

Any doubts regarding interpretation arising from this educational program or issues not covered therein shall be settled by agreement of the Directors of Consortium Partners.