

Annex No. 5*To the education program
at the Interdisciplinary Doctoral School of Agricultural Sciences***Bohdan Dobrzański Institute of Agrophysics of the Polish Academy of Sciences in
Lublin**

Discipline: Agriculture and Horticulture

Item	Number of hours	ECTS points	Year	Form of crediting	Learning outcomes ¹
1. Obligatory courses					
1.1. A major subject related to the scientific discipline of agriculture and horticulture.	30	2	I/II	Exam	W01, W02, W03, W04, U03,
1.2. Statistical methods in scientific research	30	2	I/II	Exam	W06, U06, K02, K03, K04, K05
1.3. Ethical and legal aspects in scientific research	5	1	I/II	Pass with grade	W08, U06, K05, K06, K07, K08
1.4. Specialized workshops in a selected foreign language	30	2	1st/2nd year	Exam	W05, U04, U05, K03, K02, K04
1.5. Fundraising for research and project preparation	15	2	1st/2nd year	Pass with grade	W07, U01, U05, K02, K03, K05, K06
1.6. Preparation and editing of a scientific text	15	2	I/II	Pass with grade	W04, W05, U01, U04, U06, K02, K03, K04, K05
1.7. Copyright and Intellectual Property	5	1	I/II	Pass with grade	W08, U01, K01, K02, K03, K04, K05, K06, K07
2. Elective courses					
2.1. Physical Methods in Food Research	15	2	I/III	Pass with grade	W02, W03, U01, U02, U03, K02, K03, K04, K05, K09
2.2. Cell and tissue imaging	15	2	II/III	Pass with grade	W02, W03, U01, U02, U03, K02, K03, K04, K05, K08
2.3. Molecular biology techniques	15	2	II/III	Pass with grade	W02, W03, U01, U02, U03, K02, K03, K04, K05, K09
2.4. Food safety and quality	10	2	II/III	Pass with grade	W02, W03, U01, U02, U03, K02, K03, K04, K05, K09
2.5. Selected issues in bioeconomy	10	2	II/III	Pass with grade	W02, W03, U01, U02, U03, K02, K03, K04, K05, K09

2.6. Transfer of knowledge and technology	5	1	II/III	Pass with grade	W08, U01, K03, K04, K05, K08
2.7. Disciplinary lecture	5	1	I/IV	Passing	W01, W02, U03, K01, K03
2.8. Extra-disciplinary lecture	5	1	I/IV	Passing	W01, W02, U03, K01, K03
3. Seminar	60	4	I/IV	Passing	W01, W02, W03, U01, U03, U04, U06
4. Other scientific activities					
4.1. Conducting your own research project/grant	2 ECTS /design	4	I/IV	Passing	W01, W02, W03, W04, W05, W06, W07, W08, U01, U02, U03, U04, U05, K01, K02, K03, K04, K05, K06, K07, K08, K09
4.2. Research internship abroad	2 ECTS/inter nship	4	I/IV	Passing	W01, W02, W03, W05, U01, U02, U03, U04, K01, K02, K03, K04, K05, K06, K07
4.3. Participation in a research/commercialization /implementation project	design	2	I/IV	Passing	W01, W02, W03, W05, W06, W07, W08, U01, U02, U03, U04, U05, K01, K02, K03, K04, K05, K06, K07, K08
4.4. Presentation at a scientific conference	1 ECTS/ conference	3	I/IV	Passing	W01, W02, W03, W05, U01, U02, U03, U04, K01, K02, K03, K05,
4.5. Authorship of a scientific publication from the current list of the Ministry of Science and Higher Education	4 ECTS/publi cation	8	I/IV	Passing	W01, W02, W03, W04, W05, W06, W07, W08, U01, U02, U03, U04, U05, K01, K02, K03, K04, K05, K06, K07, K08, K09
4.6. Activities promoting science		3	I/IV	Passing	W01, W02, W04, W05, W08, U01, U04, K01, K02, K05, K06, K08
5. Professional practice	10	1	I/IV	Passing	W01, W02, W03, W05, W08, W09 U01, U02, U03, K01,

					K03, K06, K07, K09
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¹⁾ Learning outcomes achieved as a result of completing a given subject. A detailed description of the outcomes marked with symbols can be found in *Annex 6 to the Education Program*.