

**Doctoral School
of the Wrocław University of Environmental and Life
Sciences**

1. The Doctoral School at the Wrocław University of Environmental and Life Sciences provides education in the following fields and disciplines:

- 1) in Exact and Natural Sciences, in the discipline of Biological Sciences;
- 2) in Engineering and Technical Sciences, in the following disciplines:
 - a) Civil Engineering, Geodesy and Transport,
 - b) Environmental Engineering, Mining and Energy;
- 3) in Agricultural Sciences, in the following disciplines:
 - a) Agriculture and Horticulture,
 - b) Nutrition and Food Technology,
 - c) Animal Science and Fisheries,
- 4) in Veterinary Sciences, in the discipline of Veterinary Science;
- 5) in Social Sciences in the discipline of Social and Economic Geography and Spatial Management.

2. The main educational goals, including competences acquired by the graduate:

The main goal of education at the Doctoral School of Wrocław University of Environmental and Life Sciences is the acquisition by graduates of competences connected with formulating new, previously unknown scientific problems and solving them in an original way based on modern research tools, using analytical methods and techniques at the highest level. The Doctoral School will enable the graduates to acquire state-of-the-art knowledge in the thematic field of the doctoral dissertation, in the relevant discipline within the exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences along with an interdisciplinary understanding of functioning in modern society. The preparation of a doctoral dissertation in accordance with the guidelines set by the Doctoral School will enable wide dissemination of the research results in the academic environment and beyond, as well as the transfer of knowledge to the economy. This will help the Doctoral School graduates to enter the international world of science and improve their position in the dynamic market of new technologies connected with a more innovative and competitive economy.

3. Identification of education modules, including the intended learning outcomes and reference to the characteristics of the 8th level of the Polish Qualifications Framework

Learning outcomes at the Doctoral School of Wrocław University of Environmental and Life Sciences		
Code	Competences acquired by a graduate of the Doctoral School of Wrocław University of Environmental and Life Sciences	reference to the characteristics of the 8th level of the Polish Qualifications Framework
Knowledge		
SDUPWr_W01	The graduate understands complex natural, social and economic phenomena and processes as well as multiple factors influencing them	P8S_WG, P8S_WK
SDUPWr_W02	The graduate has in-depth knowledge of the organization of a scientific workshop as well as of the preparation and review of scientific papers	P8S_WG
SDUPWr_W03	The graduate has in-depth knowledge of selected disciplines of exact and natural sciences, agricultural sciences, or engineering and technical sciences, veterinary sciences or social sciences	P8S_WG
SDUPWr_W04	The graduate has in-depth statistical and mathematical knowledge as well as knowledge of selected disciplines of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences enabling the graduate to explain, model and forecast processes connected with a given scientific discipline	P8S_WG
SDUPWr_W05	The graduate has in-depth knowledge of issues that are currently discussed in the academic literature in selected disciplines of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences	P8S_WG
SDUPWr_W06	The graduate has in-depth knowledge covering the principles of planning and conducting research using advanced techniques and research tools in selected disciplines of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences . The graduate has extended knowledge of scientific databases, with particular emphasis on natural and social	P8S_WG
SDUPWr_W07	The graduate knows the principles of occupational health and safety, in particular with reference to laboratory and field tests and other tests that pose a health risk	P8S_WK
SDUPWr_W08	The graduate knows the principles of creating and developing forms of individual entrepreneurship and the practical possibilities of using scientific research in selected disciplines of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences	P8S_WK
SDUPWr_W09	The graduate knows the legal determinants in selected disciplines of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences as well as general concepts and principles in the field of industrial property protection and copyright	P8S_WK
SDUPWr_W10	The graduate knows and understands the global scientific and creative achievements and their practical implications in selected disciplines of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences	P8S_WG

SDUPWr_W11	The graduate knows and understands the theoretical foundations, general issues and selected specific issues relevant to a given discipline of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences to the extent that enables the graduate to revise the existing paradigms	P8S_WG
Skills		
SDUPWr_U01	The graduate is able to use advanced techniques and research tools, appropriate to solve complex scientific problems in selected disciplines of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences	P8S_UW
SDUPWr_U02	The graduate is able to efficiently use and critically analyse scientific literature as well as materials from electronic sources	P8S_UW
SDUPWr_U03	The graduate is able to collect materials and information from various sources (also from their own research), develop the collected material and formulate conclusions	P8S_UW
SDUPWr_U04	The graduate is able to creatively develop the existing models and theoretical concepts and to create their own research concepts	P8S_UW, P8S_UU, P8S_UO
SDUPWr_U05	The graduate possesses methodological skills (theoretical and practical) allowing them to plan and conduct independent scientific research and pass expert opinions	P8S_UW, P8S_UU
SDUPWr_U06	The graduate demonstrates the ability to teach didactic classes and prepare various forms of presentations and talks in Polish and English in the disciplines of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences	P8S_UW, P8S_UU
SDUPWr_U07	The graduate demonstrates the ability to write an extensive scientific work (doctoral dissertation) and various shorter scientific studies (articles, polemics, abstracts, reports, reviews), also in English in a form appropriate for a given scientific discipline	P8S_UW
SDUPWr_U08	The graduate is able to independently manage their own professional or scientific career	P8S_UU
SDUPWr_U09	The graduate is able to comprehensively analyse the causes and course of social and economic processes connected with exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences formulate their own opinion about them, construct and verify hypotheses, forecast and model complex social and economic processes using advanced research methods and tools	P8S_UW
SDUPWr_U10	The graduate can use knowledge from various fields to creatively identify, formulate and innovatively solve complex problems or do research tasks, in particular: define the purpose and subject of research, formulate a research hypothesis, develop research methods, techniques and tools, creatively apply them and draw conclusions on the basis of research results	P8S_UW
SDUPWr_U11	The graduate can use the English language at a level that is sufficient to participate in the international scientific and professional environment	P8S_UK
SDUPWr_U12	The graduate can plan and implement individual and team research projects, also in an international environment	P8S_UO

Social skills		
SDUPWr_K01	The graduate is able to define and select priorities needed to do a task	P8S_KO
SDUPWr_K02	The graduate correctly identifies and resolves dilemmas connected with the graduate's profession. The graduate is ready to fulfil the social obligations of researchers and creators	P8S_KO, P8S_KR
SDUPWr_K03	The graduate understands the need to systematically follow scientific journals in order to raise general and specialist knowledge in their discipline	P8S_KK
SDUPWr_K04	The graduate is aware of the responsibility for assessing the risks arising from the research techniques and tools used in research	P8S_KO
SDUPWr_K05	The graduate is ready to conduct independent research and face challenges in the professional and public sphere, taking into account research ethics, responsibility for the consequences and the need to promote best practices	P8S_KO, P8S_KR
SDUPWr_K06	The graduate takes professional ethical responsibility for interfering with a living body	P8S_KR, P8Z_KO

Characteristics of PQF levels for higher education qualifications

P = PQF level (8)

S = a characteristic typical of qualifications obtained in the framework of higher education

W = **knowledge**

G = depth and scope

K = context

U = **skills**

W = use of knowledge

K = communication

O = work organization

U = learning

K = **social competences**

K = critical assessment

O = responsibility

R = professional role

Education modules and the expected learning outcomes					
Education modules	ECTS	Reference to the expected learning outcomes	Expected learning outcomes	Method of verification of acquiring the expected learning outcomes by the doctoral student	
Basic	PhD seminar	8	SDUPWr_W01; SDUPWr_W03; SDUPWr_W05; SDUPWr_W07; SDUPWr_U03; SDUPWr_U06; SDUPWr_U08; SDUPWr_U09; SDUPWr_U010; SDUPWr_K03; SDUPWr_K05	The student understands the need to systematically follow scientific journals in order to improve general and specialist knowledge in the selected discipline and related disciplines. The student is able to present the latest achievements in the selected discipline and the results of his/her research in the context of literature on the subject. The student is able to publically present the scope, hypotheses and goals, methodology and results of his/her research. The student understands the fundamental dilemmas of modern civilisation. The student can initiate a scientific debate and participate in scientific discourse. The student can disseminate research results, also in public.	credit
	English for special purposes	6	SDUPWr_U07; SDUPWr_U011; SDUPWr_U012	The student acquires skills needed to prepare, edit and review scientific papers in English. The student is able to freely use English-language literature and conduct a scientific discussion in English. The student is able to present the results of his/her own research as well as problems and findings of other researchers in the selected discipline in English. The student is sufficiently fluent in English to actively participate in the international academic community.	exam
	Teaching methodology	1	SDUPWr_U06;	The student knows and understands the methodology of conducting classes.	credit
	Psychology	1	SDUPWr_K01;	The student can independently plan and contribute to the development of others.	
	Self-presentation	2	SDUPWr_K02;	The student is able to develop training programmes and curricula and implement them using modern methods and tools.	
Voice emission	1	SDUPWr_K03; SDUPWr_U05	The student can disseminate knowledge and verify it. The student is able to conduct classes using self-presentation and voice emission methods.		

Development of the discipline and related disciplines	New trends in the discipline and in related disciplines	3	SDUPWr_W03; SDUPWr_W04; SDUPWr_W05; SDUPWr_W011; SDUPWr_U01; SDUPWr_U02; SDUPWr_U04; SDUPWr_U05; SDUPWr_U07	<p>The student knows and understands the main development trends of scientific disciplines relevant to a given science.</p> <p>The student keep up with the latest achievements in the field of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences.</p> <p>The student understands the need to systematically learn about the current trends and innovations in the field of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences in order to raise general and specialist knowledge.</p> <p>The student demonstrates the need to systematically update the knowledge of natural or social science in order to use it in practice.</p> <p>The student is able to use new trends and knowledge to identify research problems and disseminate research results as well as fulfil their social obligations in an international professional environment.</p> <p>The student can solve the most complex problems, create innovative solutions based on the use of research results.</p> <p>The student acquires knowledge connected with the application of new trends and analytical techniques as well as knowledge of current research problems.</p>	credit
Interdisciplinary tutorial	Interdisciplinary problem solving	6	SDUPWr_W01; SDUPWr_W04; SDUPWr_W06; SDUPWr_W07; SDUPWr_W09; SDUPWr_W11; SDUPWr_U03; SDUPWr_U04; SDUPWr_U05; SDUPWr_U09; SDUPWr_U010; SDUPWr_U012; SDUPWr_K02; SDUPWr_K03	<p>The student understands the need to follow fundamental issues necessary to understand the development of exact and natural sciences, agricultural sciences, engineering and technical sciences, veterinary sciences or social sciences in a given discipline and related disciplines.</p> <p>The student is able to use advanced techniques and research tools in order to solve complex scientific problems in a given discipline and in an interdisciplinary approach.</p> <p>The student acquires knowledge in the field of modelling and solving research problems, knowledge from outside his or her specialisation, as well as knowledge connected with the natural aspects of his or her specialised research.</p> <p>The student is able to connect and situate his or her research problems in the context of interdisciplinary research.</p> <p>The student is able to use interdisciplinary knowledge to creatively identify, formulate and innovatively solve complex problems or do research tasks, in particular by defining the purpose and subject of research and formulating the research hypothesis.</p> <p>The student knows and understands the economic, legal and other important considerations of research activity.</p>	credit
Scientific research methodology	Design of research	1	SDUPWr_W02; SDUPWr_W04; SDUPWr_W06; SDUPWr_W07; SDUPWr_W08; SDUPWr_U01; SDUPWr_U03; SDUPWr_U04; SDUPWr_U05; SDUPWr_U09; SDUPWr_U010; SDUPWr_K02 SDUPWr_K03	<p>The student can use knowledge from various fields to creatively plan, identify, formulate and innovatively solve complex problems or do research tasks in the given scientific disciplines.</p> <p>The student can define the aim and scope of research, correctly formulate a research hypothesis, develop research methods and techniques, and use them creatively.</p> <p>The student can make correct inferences based on research results.</p> <p>The student can transfer research results to the economic and social area.</p>	exam
		SDUPWr_W02;	The student is able to properly design an experiment, define key research hypotheses in the		

	Data analysis techniques	4	SDUPW _r _W04; SDUPW _r _W06; SDUPW _r _U01; SDUPW _r _U03; SDUPW _r _U04; SDUPW _r _U05; SDUPW _r _U09; SDUPW _r _U010; SDUPW _r _K04	<p>given discipline, set verification methods and correctly formulate the research and interpretation process.</p> <p>The student knows the basic and fundamental concepts of mathematical statistics or qualitative analysis, and is able to apply them in practice.</p> <p>The student is familiar with the theory of testing statistical hypotheses qualitative analysis interpretation, which is a scientific instrument for the verification of research hypotheses. The student knows the key tools needed for data analysis.</p> <p>The student can use basic and advanced features of statistical software to perform a wide variety of statistical analyses or tools and techniques of qualitative analysis.</p> <p>The student knows the research programmes currently conducted in Poland and abroad.</p> <p>The student knows the rules of occupational health and safety, especially with regard to field tests and other tests that pose a health risk (laboratories). The student is able to use advanced research techniques and tools to solve complex scientific problems in a given field of research.</p>	exam
	Ethics and law in scientific research	1	SDUPW _r _W07; SDUPW _r _W09; SDUPW _r _K04;; SDUPW _r _K05; SDUPW _r _K06	<p>The student knows and understands the need for ethical and lawful conducting of scientific research.</p> <p>The student is ready to conduct research in order to advance science by addressing professional challenges and preparing publication, taking into account the ethical dimension of research, responsibility for the consequences of one's actions and the need to develop best practices.</p> <p>The student is willing to observe rules regarding the need to maintain the quality of scientific activity, the culture of cooperation and the culture of competition.</p> <p>The student is able to contribute to the development of a pro-quality culture of research in a given discipline and related disciplines.</p>	exam
Workshops	Academic writing	3	SDUPW _r _W02; SDUPW _r _W08; SDUPW _r _W09; SDUPW _r _W010; SDUPW _r _U02; SDUPW _r _U03;	<p>The student is able to efficiently use scientific literature by critically analysing data and materials in electronic form.</p> <p>The student is able to specify key research hypotheses in the given discipline, determine methods of their verification and formulate the investigative and interpretative process.</p> <p>The student is able to collect materials and information from a variety of sources (including data from their own research), organise the materials and formulate conclusions.</p> <p>The student knows how to organise scientific activity, in particular how to write and present research findings.</p> <p>The student knows and understands social and legal considerations connected with undertaking and commercialising scientific research.</p> <p>The student knows and understands the broad context of research funding and knowledge transfer on a national and international scale, including issues connected with databases (bibliographic references, citation indexes), project competitions and copyright.</p> <p>The student demonstrates the need to systematically update the knowledge of natural or social science in order to formulate new research hypotheses in order to obtain external research funds.</p>	credit
	Writing research proposals	3	SDUPW _r _U04; SDUPW _r _U05; SDUPW _r _U010; SDUPW _r _K02		
	Practical and legal considerations of scientific research commercialisation	1			
Scientific self-development	1. training courses outside UPW _r – must be accepted by the supervisor and the Doctoral School Board (1 ECTS point for 1 course) – max. 2 courses	-	SDUPW _r _W010; SDUPW _r _W011; SDUPW _r _U08; SDUPW _r _K01; SDUPW _r _K02;	<p>The student is ready to maintain and develop the ethos of the research and creative communities.</p> <p>The student understands the need for scientific self-improvement in order to improve general and specialist knowledge in a given discipline.</p>	

	2. scientific meetings in institutions referred to in Article 7(1) of the Act of 20 July 2018 – Law on Higher Education and Science, excluding UPWr scientific societies (1 ECTS point for 1 scientific meeting) – max. 4 scientific meetings	-	SDUPWr_K05; SDUPWr_K06;	The student understands the need for lifelong self-improvement. The student is ready to acquire the skills needed to better understand and independently plan the determinants of a scientific career.	credit
	3. several-day-long specialist training ending with a certificate of completion; purpose – learning new research techniques, calculation methods (1 ECTS point for one training) – max. 2 specialist training courses	-			
	4. active participation in foreign international conferences (oral presentation; 2 ECTS points for one conference) – max. 2 conferences	-			
	Teaching practice in accordance with the Regulations of the Doctoral School of Wrocław University of Environmental and Life Sciences	12	SDUPWr_W04 SDUPWr_W08		

4. Curriculum of the Doctoral School

Framework curriculum of the Doctoral School of Wrocław University of Environmental and Life Sciences

Year I – compulsory coursework

Item	Education module	Name of course	USOS course code	Form of study	Form of course completion	Number of contact hours		ECTS ¹
						term 1	term 2	
1.	Basic	PhD seminar	SD>P-SEM	seminar	credit	10	-	2
		English for special purposes	SD>P-ANG (2)	classes	credit	-	30	2
		Teaching methodology	SD>P-MPZ	classes	credit	-	5	1
		Psychology	SD>P-PSYCH	classes	credit	-	5	1
		Self-presentation	SD>P-AUTOPR	classes	credit	10	-	2
		Voice emission	SD>P-EG	classes	credit	5	-	1
2.	Interdisciplinary tutorial	Interdisciplinary problem solving	SD>KI-INTERRP (2)	seminar	credit	-	20	6
3.	Scientific research methodology	Design of research	SD>MPBN-PB	classes	credit	10	-	1
		Data analysis techniques	SD>MPBN-TAD	classes	credit	-	20	2
		Ethics and law in scientific research	SD>MPBN-EP	lecture	exam	10	-	1
4.	Workshops	Academic writing workshops	SD>W-ARTN	classes	credit	10	-	1
		Writing research proposals workshops	SD>W-PROJ	classes	credit	5	-	1
5.	Scientific self-improvement ²	1. training courses outside UPWr – must be accepted by the supervisor and the Doctoral School Board (1 ECTS point for 1 course) – max. 2 courses	SD>SD-KKSZ	-	credit	-	-	-
		2. scientific meetings in institutions referred to in Article 7(1) of the Act of 20 July 2018 – Law on Higher Education and Science, excluding UPWr scientific societies (1 ECTS point for 1 scientific meeting) – max. 4 scientific meetings	SD>SD-SN	-	credit	-	-	-
		3. several-day-long specialist training ending with a certificate of completion; purpose – learning new research techniques, calculation methods (1 ECTS point for one training) – max. 2 specialist training courses	SD>SD-SZSPEC	-	credit	-	-	-
		4. active participation in foreign international conferences	SD>SD-MKONF	-	credit	-	-	-

		(oral presentation; 2 ECTS points for one conference) – max. 2 conferences						
6.	Teaching practice ³	Teaching practice in accordance with the Regulations of the Doctoral School of Wrocław University of Environmental and Life Sciences	SD>PZ-PZ		credit	15 (co-teaching)		4

¹ ECTS – 25-30 hours of doctoral student’s work, including: participation in classes, independent preparation for classes as part of the course.

² The module should be done at a time chosen by the doctoral student, between semesters 1–7. In order to pass the entire module, the student has to earn min. 8 ECTS by participating in courses, training, conferences, scientific meetings.

³ Teaching practice – a course carried out throughout the academic year. Credit obtained in the summer semester.

Year II – compulsory coursework

Item	Education module	Name of course	USOS course code	Form of study	Form of course completion	Number of contact hours		ECTS ¹
						term 3	term 4	
1.	Basic	PhD seminar	SD>P-SEM	seminar	credit	10	-	2
		English for special purposes	SD>P-ANG (3)	classes	credit/exam ³	30	-	2
		English for special purposes	SD>P-ANG (4)	classes	credit/exam ³		30	2
2.	Development of the discipline and related disciplines	New trends in the discipline and related disciplines	SD>RDY-DYSCY(3)	lecture	credit	5	-	1,5
		New trends in the discipline and related disciplines	SD>RDY-DYSCY(4)	lecture	credit	-	5	1,5
3.	Scientific research methodology	Data analysis techniques	SD>MPBN-TAD	classes	exam	-	20	2
4.	Workshops	Academic writing workshops	SD>W-ARTN (3)	classes	credit	15	-	1
		Academic writing workshops	SD>W-ARTN (4)	classes	credit	-	5	1
		Writing research proposals workshops	SD>W-PROJ	classes	credit	15	-	2
		Practical and legal considerations of scientific research commercialisation	SD>W-PRKOMERC	lecture	credit	10	-	1
5.	Scientific self-improvement ²	1. training courses outside UPW _r – must be accepted by the supervisor and the Doctoral School Board (1 ECTS point for 1 course) – max. 2 courses	SD>SD-KKSZ	-	credit	-	-	-

		2. scientific meetings in institutions referred to in Article 7(1) of the Act of 20 July 2018 – Law on Higher Education and Science, excluding UPWr scientific societies (1 ECTS point for 1 scientific meeting) – max. 4 scientific meetings	SD>SD-SN	-	credit	-	-	-
		3. several-day-long specialist training ending with a certificate of completion; purpose – learning new research techniques, calculation methods (1 ECTS point for one training) – max. 2 specialist training courses	SD>SD-SZSPEC	-	credit	-	-	-
		4. active participation in foreign international conferences (oral presentation; 2 ECTS points for one conference) – max. 2 conferences	SD>SD-MKONF	-	credit	-	-	-
6.	Teaching practice	Teaching practice in accordance with the Regulations of the Doctoral School of Wrocław University of Environmental and Life Sciences	SD>PZ-PZ		credit	15 (co-teaching)		4

¹ ECTS – 25-30 hours of doctoral student’s work, including: participation in classes, independent preparation for classes as part of the course.

² The module should be done at a time chosen by the doctoral student, between semesters 1–7. In order to pass the entire module, the student has to earn min. 8 ECTS by participating in courses, training, conferences, scientific meetings.

³ An exam is administered in the last semester of the subject entitled “English for Special Purposes.”

Year III – compulsory coursework

Item	Education module	Name of course	USOS course code	Form of study	Form of course completion	Number of contact hours		ECTS ¹
						term 5	term 6	
1.	Basic	PhD seminar	SD>P-SEM	seminar	credit	10	-	2
2.	Scientific self-improvement²	1. training courses outside UPWr – must be accepted by the supervisor and the Doctoral School Board (1 ECTS point for 1 course) – max. 2 courses	SD>SD-KKSZ	-	credit	-	-	-
		2. scientific meetings in institutions referred to in Article 7(1) of the Act of 20 July 2018 – Law on Higher Education and Science, excluding UPWr scientific societies (1 ECTS point for 1 scientific meeting) – max. 4 scientific meetings	SD>SD-SN	-	credit	-	-	-

		3. several-day-long specialist training ending with a certificate of completion; purpose – learning new research techniques, calculation methods (1 ECTS point for one training) – max. 2 specialist training courses	SD>SD-SZSPEC	-	credit	-	-	-
		4. active participation in foreign international conferences (oral presentation; 2 ECTS points for one conference) – max. 2 conferences	SD>SD-MKONF	-	credit	-	-	-
3.	Teaching practice	Teaching practice in accordance with the Regulations of the Doctoral School of Wrocław University of Environmental and Life Sciences	SD>PZ-PZ		credit	15 (co-teaching)		4

¹ ECTS – 25-30 hours of doctoral student’s work, including: participation in classes, independent preparation for classes as part of the course.

² The module should be done at a time chosen by the doctoral student, between semesters 1–7. In order to pass the entire module, the student has to earn min. 8 ECTS by participating in courses, training, conferences, scientific meetings.

Year IV – compulsory coursework

Item	Education module	Name of course	USOS course code	Form of study	Form of course completion	Number of contact hours		ECTS ¹
						term 7	term 8	
1.	Basic	PhD seminar	SD>P-SEM	seminar	credit	10	-	2
2.	Scientific self-improvement²	1. training courses outside UPWr – must be accepted by the supervisor and the Doctoral School Board (1 ECTS point for 1 course) – max. 2 courses	SD>SD-KKSZ	-	credit	-	-	-
		2. scientific meetings in institutions referred to in Article 7(1) of the Act of 20 July 2018 – Law on Higher Education and Science, excluding UPWr scientific societies (1 ECTS point for 1 scientific meeting) – max. 4 scientific meetings	SD>SD-SN	-	credit	-	-	-
		3. several-day-long specialist training ending with a certificate of completion; purpose – learning new research techniques, calculation methods (1 ECTS point for one training) – max. 2 specialist training courses	SD>SD-SZSPEC	-	credit	-	-	-

		4. active participation in foreign international conferences (oral presentation; 2 ECTS points for one conference) – max. 2 conferences	SD>SD-MKONF	-	credit	-	-	-
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¹ ECTS – 25-30 hours of doctoral student’s work, including: participation in classes, independent preparation for classes as part of the course.

² The module should be done at a time chosen by the doctoral student, between semesters 1–7. In order to pass the entire module, the student has to earn min. 8 ECTS by participating in courses, training, conferences, scientific meetings.

5. Duration of education at the Doctoral School: 4 years.

6. Academic degree obtained by the graduate:

- 1) *Doktor* (PhD) of Exact and Natural Sciences in the discipline of Biological Sciences,
- 2) *Doktor* (PhD) of Engineering and Technical Sciences in the following disciplines:
 - a) Civil Engineering, Geodesy and Transport,
 - b) Environmental Engineering, Mining and Energy.
- 3) *Doktor* (PhD) of Agricultural Sciences in the following disciplines:
 - a) Agriculture and Horticulture,
 - b) Nutrition and Food Technology,
 - c) Animal Science and Fisheries.
- 4) *Doktor* (PhD) of Veterinary Sciences in the discipline of Veterinary Science.
- 5) *Doktor* (PhD) of Social Sciences in the discipline of Social and Economic Geography and Spatial Management.

7. Education at the Doctoral School ends after:

- 1) Completion of the Doctoral School curriculum,
- 2) Completion of the individual research plan,
- 3) Publication of a JCR-indexed paper,
- 4) Submission of the doctoral dissertation.

