

## **PROGRAMME**

### **OF THE DOCTORAL SCHOOL AT POZNAŃ UNIVERSITY OF ECONOMICS AND BUSINESS**

as of the academic year 2020/2021

Poznań, 24 January 2020



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## Introduction

The PUEB Doctoral School is operated by Poznań University of Economics and Business.

The organisational solutions adopted by the Doctoral School and the requirements for the future doctoral students comply with the Law on Higher Education and Science of 20 July 2018.

Education at the Doctoral School lasts for 8 semesters and prepares the doctoral students for conducting research, writing doctoral dissertations, their submission and defence.

The educational process at the PUEB Doctoral School ends with the submission of the doctoral dissertation.

Doctoral dissertations may be written in two disciplines of science: economics and finance, or management and quality science.

The programme of education complies with the Law on Higher Education and Science of 20 July 2018, the Polish Qualifications Framework – Level 8, as well as with the following documents: Polish Charter for Researchers, *Salzburg Principles* of 2005, Salzburg II Initiative of 2010, also “the Principles for Innovative Doctoral Training” prepared by ERA Steering Group and recommended in the European Council Conclusions on the modernisation of higher education of 28 and 29 November 2011.



## **I. Basic information**

### **1.1. Level of education**

Education at the PUEB Doctoral School corresponds to level 8 of the Polish Qualifications Frameworks.

### **1.2. Defining the field and discipline of science**

The PUB Doctoral School educates and prepares doctoral students for the submission of doctoral dissertations in one of the two disciplines:

- economics and finance,
- management and quality science.

Both these disciplines belong to the area of social sciences.

### **1.3. Relationship of the education programme with the PUEB mission and strategy**

The programme implements the PUEB Strategy in the area of research (strategic objectives N1 and N2) as well as in the area of education (strategic objective K1, specific objective K1.2).

### **1.4. Preliminary requirements for candidates**

A person applying for the admission to the PUEB Doctoral School must have the M.A., M.Sc. , or an equivalent degree, as well as the qualities required for education in a doctoral school, in particular:

- cognitive curiosity,
- interest in economics, finance, management, or quality science in a broad sense,
- ability to notice problems in the fields of economics, finance, management or quality science,
- participation in research or research and development projects during or after studies,
- knowledge of English at a level not lower than B2 of the Common European Framework of Reference for Languages.

## II. Learning outcomes

The learning outcomes at the PUEB Doctoral School have been prepared with reference to level 8 of the Polish Qualifications Framework.

**Table 1. Learning outcomes**

Symbol	Reference to the Polish Qualifications Framework – level 8	<p style="text-align: center;"><b>DESCRIPTION OF THE LEARNING OUTCOMES</b> at the PUEB Doctoral School</p> <p style="text-align: center;">A graduate of the PUEB Doctoral School:</p>
<b>KNOWLEDGE</b>		
K3_W01	P8S_WG	knows and understands to the degree enabling them to revise the existing paradigms – the world heritage in the scope of the theoretical foundations, as well as the general matters and selected specific issues from the disciplines of science in which they conduct research
K3_W02	P8S_WG	knows and understands the methodology of conducting research to the degree allowing them for formulating and solving research problems by means of methods and tools specific for the disciplines of science they have selected
K3_W03	P8S_WG	knows and understands the primary development tendencies of the disciplines of science which are the subject of their education
K3_W04	P8S_WG P8S_WK	knows and understands economic, legal and ethical determinants of research, the basic principles of the transfer of knowledge to the economic and social sphere, the commercialisation of research findings and the know-how resulting from them, as well as the rules of the dissemination of research findings, also in the open-access mode
K3_W05	P8S_WK	knows and understands the fundamental dilemmas of today's civilisation
<b>SKILLS</b>		
K3_U01	P8S_UW P8S_UO	can use their knowledge for creative identification and formulation of scientific problems as well as offering innovative solutions to them, in particular: defining the objective and the subject of research, developing research methods and tools and using them creatively, interpreting research findings and drawing conclusions from them
K3_U02	P8S_UW P8S_UK	can critically analyse and assess research findings and their role in the development of science
K3_U03	P8S_UK	can communicate specialist issues to the degree enabling them to actively participate in the international research community and to disseminate research findings
K3_U04	P8S_UU P8S_UO	can independently develop their knowledge and skills, plan their own research development, as well as inspire and organise other people's development
K3_U05	P8S_UU	can plan classes or groups of classes using modern methods and tools



SOCIAL COMPETENCIES		
K3_K01	P8S_KK	is ready to critically analyse the scientific development in their selected discipline of science, including their own contribution to its development
K3_K02	P8S_KO	is ready to fulfil the social obligations of a researcher, think and act in an entrepreneurial way
K3_K03	P8S_KR	is ready to uphold and develop the ethos of the research community, including conducting research independently and respecting the rule of the public ownership of research findings, with respect to the protection of intellectual property

**Meanings of symbols:**

- K3 – learning outcomes for qualifications at level 8 PQF
- W – category of knowledge
- U – category of skills
- K (after underscore) – category of social competencies
- P8S – level 8 of the Polish Qualifications Framework (PQF), the second degree characteristics

**Meanings of the acronyms (in compliance with PQF):** descriptive category – aspects of basic significance

- WG – range and depth – completeness of cognitive perspective and correlations
- WK – context – determinants, results
- UW – application of knowledge – solved problems and performed tasks
- UK – communication – receiving and sending messages, dissemination of knowledge in the research environment, using a foreign language
- UO – organisation of work – planning and participating in teamwork
- UU – studying – planning self-development and development of other people
- KK – assessment – a critical approach
- KO – responsibility – fulfilment of social obligations and acting in the public interest
- KR – professional role – autonomy and development of the work ethos



### **III. The organisation of the education process at the PUEB Doctoral School**

#### **3.1. Duration of education at the PUEB Doctoral School**

Education at the PUEB Doctoral School lasts for 8 semesters.

#### **3.2. Form of education at the PUEB Doctoral School**

Education takes a full-time form. Regular classes are held on weekdays, starting from the first week of the academic year. Classes run by visiting lecturers may be held on Saturdays or Sundays.

Participation in classes is obligatory for all doctoral students.

Classes are conducted in English, with the exception of the cycle of education which started in the academic year 2019/2020. If all the participants of a given education cycle speak Polish, classes can be run in Polish. The decision on the language of instruction is made by the Director of the Doctoral School.

#### **3.3. Elements of doctoral education**

The education includes:

- implementation of the education programmes,
- implementation of the individual research plan,
- professional apprenticeship in the form of conducting or co-conducting classes.

#### **3.4. Scope of the programme of education**

The programme includes the following elements:

- critical study of research literature,
- designing research and selection of adequate research methods and tools,
- preparation of publications,
- preparation of presentations and public speaking,
- ability to establish research contacts,
- conducting classes.

Moreover, the programme of education includes support for doctoral students in acquiring so-called transferable skills.



The programme of education includes:

- mandatory courses,
- elective courses, which – having been selected – are mandatory for a doctoral student,
- doctoral seminars,
- doctoral workshops with the presentation of the concept of the doctoral dissertation as a part of the course ‘Planning research projects2’ (2<sup>nd</sup> semester),
- participation and delivering a paper at a conference of doctoral students organised at PUEB (4th semester),
- mid-semester evaluation in 4th semester,
- professional apprenticeship.

The mandatory and elective courses are conducted in the forms of lectures, classes (including a computer laboratory), specialisation seminars, workshops and doctoral seminars.

In each semester there are lectures and classes held for all the doctoral students of a given year or different years, aimed at integrating the community of doctoral students, e.g. the inauguration lecture at the beginning of an academic year (odd semesters), presentations from the cycle “The Best Doctoral Dissertations at PUEB”, library training (databases, software for bibliography management), training in organising and financing research, lectures by visiting lecturers, workshops developing the so-called transferable skills, the conference of the PUEB doctoral students (4th semester).

**The elective subjects** include:

- in the 2nd semester – two specialty courses, to be selected with reference to the subdisciplines covered by the doctoral dissertation: advanced financial economics, advanced macroeconomics, advanced microeconomics, advanced quality science and advanced management. A doctoral student selects two courses.
- In the 3rd semester – a selection of publication workshops in relations to the subdiscipline covered by the doctoral dissertation.
- In the 4th semester – a specialty seminar in the following areas: economics, finance, quality science, management science – in 10-hour blocks; the demand for particular blocks is based on the subjects of the doctoral dissertations and the availability of visiting lecturers. A doctoral student selects 2 seminars.
- In the 6th semester – a specialty seminar in the following areas: economics, finance, quality science, management science – in 10-hour blocks; the demand for particular blocks is based on the subjects of the doctoral dissertations and the availability of visiting lecturers. A doctoral student selects 1 seminar.





The doctoral seminar starts in the first semester as a 5-hour course. From the second semester, the seminar consists of 10 hours in a semester.

The research supervision over the preparation of the doctoral dissertation is exercised by a supervisor, or supervisors, or by a supervisor and an auxiliary supervisor. The supervisor or supervisors are appointed by the PUEB Academic Advancement Board in the period of 3 months after a doctoral student starts education.

Within 12 months from the beginning of education, a doctoral student is obliged to submit an individual research plan. The research plan as a part of the preparation for the doctoral dissertation should be submitted during the course "Designing research 2", which includes doctoral workshops (2<sup>nd</sup> semester).

During the 4th semester, a doctoral student takes part in the conference of doctoral students organised at PUEB and presents their own article (a presentation and the submitted text of the article).

The implementation of the individual research plan is subject to a mid-term evaluation at half of the education process, i.e. in the 4<sup>th</sup> semester.

The ECTS grading scale includes mandatory and elective courses, as well as seminars. The total number of classes which are part of the education programme corresponds to the ECTS score 46 and the overall number of 550 instruction hours. The number of hours of the particular groups of courses and the doctoral seminar is shown in table 2.

Table 2. Number of instruction hours and ECTS score

Type	Number of hours	ECTS score
Mandatory courses	289	24
Elective courses	186	14
Doctoral Seminar	75	8
TOTAL	550	46

Credits and exams in all the subjects covered by the education programme are graded in accordance with the following grade scale (Table 3)

Table 3. Grade scale

Grade	PL-Abbr.	Number	Letter	Score
Very good	bdb	5,0	<b>A</b>	90-100
Good plus	db pl	4,5	<b>B</b>	82-89
Good	db	4,0	<b>C</b>	73-81
Satisfactory plus	dst pl	3,5	<b>D</b>	64-72
Satisfactory	dst	3,0	<b>E</b>	55-63



Poor	ndst	2,0	F	54 and fewer
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### 3.5. Results of independent research

The core results of the research conducted independently by doctoral students are:

- Research publications,
- Research or research and development projects; it is desirable that each doctoral student submit a research project application,
- Participation in research projects,
- Participation in conferences,
- Written and submitted a doctoral dissertation.

### 3.6. The required length of professional apprenticeship

Doctoral students are required to undergo a professional apprenticeship in the form of conducting or co-conducting classes for the following number of hours: I year 0 hour, II year (3rd or 4th semester) – 15 hours, III year – 15 hours, IV year – 15 hours.



## **IV. The curriculum of studies at the PUEB Doctoral School**

### **4.1. Curriculum**

The tables below show the curriculum divided into years and semesters. They also include the number of hours, ECTS score, the form of classes and the form of credit.

Table 4. Curriculum



No.	Courses	Hours	I year							
			1st semester				2nd semester			
			ECTS	L	C	form of credit	ECTS	L	C	form of credit
1	Applied statistics	45	3	15	30	E				
2	Applied econometrics	30	2		30	P				
3	History and methodology of economic sciences	30	2	30		P				
4	Publishing workshops1	8	1		8	P				
5	Designing research1	12	1		12	P				
6	Joint lectures and classes	20	1	12		P (no grade)	1	8		P (no grade)
7	Methods of quantitative and qualitative research	30					2		30	P
8	Designing research2+doctoral workshops	16					2		16	P
9	Elective specialty courses (2)*	84					6	60	24	P
10	Doctoral seminar	15	1		5	P	1		10	P
Total in the semester			11	57	85	E(2), P(4), P no grade(1)	12	68	80	P(4), P no grade (1)
Total in the academic year		290	142				148			
Number of examinations in the academic year							2			

\* Doctoral dissertations in the field of economics (course I30/c12; 3ECTS): advanced macroeconomics and advanced microeconomics

Doctoral dissertations in the field of finance (course: I30/c12; 3ects): advanced financial economics and advanced macroeconomics or advanced microeconomics

Doctoral dissertation in the field of management science (course I30 c/12; 3ECTS): advanced microeconomics and advanced management

Doctoral dissertations in the field of quality science (course I30 / c12; 3ECTS): advanced quality science and advanced management or advanced microeconomics



No.	Courses	Hours	II year							
			3rd semester				Semester 4.			
			ECTS	L	C	form of credit	ECTS	L	C	form of credit
1	Elective specialty courses(2)**	60	4		60	P				
2	Publishing workshop2***	12	1		12	P				
3	Introduction to academic teaching	12	1		12	P				
4	Joint lectures and classes	26	1		10	P (no grade)	1		16	P (no grade)
5	Doctoral seminars	20	1		10	P	1		10	P
6	Elective specialty seminars (2)****	20					2		20	P
7	Professional apprenticeship									P (no grade)
Total in the semester			8		104	P(4), P no grade(1)	4		46	Z(2), Z no grade (2)
Total in the academic year		150	104				46			
Number of examinations in the academic year							0			

\*\* two courses to choose from (I30 / 2 ECTS): advanced statistics, advanced econometrics, qualitative research methods, data science, research methods in quality science.

\*\*\* two workshops to choose from (I6), conducted by journal editors/publishing authors from the fields: economics, finance, management science, quality science.

\*\*\*\* an offer prepared on the basis of the themes of doctoral dissertations, with the following fields to choose from (c10 / 1 ECTS): economics, finance, management science, quality science.



No.	Courses	Hours	III year							
			5th semester				6th semester			
			ECTS	L	C	form of credit	ECTS	L	C	form of credit
1	Research ethics and intellectual property	12	1	12		P				
2	Philosophy of science	16	1	16		P				
3	Joint lectures and classes	16	1		8	P (no grade)	1		8	P (no grade)
4	Doctoral seminar	20	1		10	P	1		10	P
5	Elective specialty seminar (1)****	10					1		10	P
6	Professional apprenticeship									P (no grade)
Total in the semester			4	28	18	P(3), P no grade(1)	3	0	28	P(2), P no grade (2)
Total in the academic year		74	46				28			
Number of examinations in the academic year							0			

\*\*\*\* an offer prepared based on the themes of doctoral dissertations, with the following fields to choose from(C 10 / 1 ECTS): economics, finance, management science, quality science.



No.	Courses	Hours	IV year							
			7th semester				8th semester			
			ECTS	L	C	form of credit	ECTS	L	C	form of credit
1	Joint lectures and classes	16	1		8	P (no grade)	1		8	P (no grade)
2	Doctoral seminar	20	1		10	P	1		10	P
3	Professional apprenticeship									P (no grade)
Total in the semester			2	0	18	P(1), P no grade(1)	2	0	18	P(1), P no grade (2)
Total in the academic year		36	18				18			
Number of examinations in the academic year							0			

Table 5. Elective courses

No.	Course	Number of hours	ECTS
<b>2 nd semester</b>			
1	Advanced financial economics	30 (L), 12 (C)	3
2	Advanced macroeconomics	30 (L), 12 (C)	3
3	Advanced microeconomics	30 (L), 12 (C)	3
4	Advanced quality science	30 (L), 12 (C)	3
5	Advanced management	30 (L), 12 (C)	3
<b>3rd semester</b>			
1	Data science	30	2
2	Advanced econometrics	30	2
3	Methods of quality research	30	2
4	Research methods in quality science	30	2
5	Advanced statistics	30	2
6	Publishing workshop 2	12	1
<b>4th semester</b>			
1	Elective specialty seminars (2)	20	2
<b>6th semester</b>			
1	Elective specialty seminar (1)	10	1



## 4.2. List of courses with the proposed teachers

Table 6. Staffing of the courses

No.	Subjects	ECTS	Hours	Semester	Teachers
1.	Data science	2	30	3	prof. dr hab. Witold Abramowicz, dr Agata Filipowska, dr Milena Stróżyńska, dr Krzysztof Węcel
2.	Applied econometrics	2	30	1	dr hab. Paweł Kliber, dr Przemysław Garsztka, dr Łukasz Wawrowski, vacancy
3.	Advanced econometrics	2	30	3	prof. dr hab. Małgorzata Doman, dr hab. Agata Kliber, prof. UEP, dr hab. Barbara Będowska-Sójka, prof. UEP
4.	Advanced financial economics	3	30(w), 12(c)	2	dr hab. Agata Kliber, prof. UEP, dr hab. Paweł Marszałek, prof. UEP, dr hab. Jacek Mizerka, prof. UEP
5.	Research ethics and intellectual property protection	1	12	5	prof. dr hab. Zenon Foltynowicz, dr hab. Barbara Pogonowska, prof. UEP, dr Anna Waligóra
6.	Philosophy of science	1	16	5	dr hab. Andrzej W. Nowak, prof. UAM
7.	History and methodology of economic sciences	2	30	1	prof. dr hab. Marian Gorynia, prof. dr hab. Marek Ratajczak, vacancy
8.	Specialty seminar, in 10-hour blocks in economics, finance, quality science, management	2	20	4	Vacant (the staff selected in compliance with the demand based on the themes of doctoral dissertations, including lecturers from outside PUEB)
9.	Advanced macroeconomics	3	30(l), 12(c)	2	dr hab. Michał Konopczyński, prof. UEP, dr hab. Piotr Maćkowiak, prof. UEP, dr hab. Ewa Mińska-Struzik, prof. UEP, dr Michał Pilc.
10.	Methods of qualitative and quantitative research	2	30	2	dr hab. Sylwester Białowas, prof. UEP, dr hab. Maciej Ławrynowicz, prof. UEP, dr hab. Iwona Olejnik, prof. UEP, vacancy



11.	Methods of qualitative research	2	30	3	dr hab. Iwona Olejnik, prof. UEP, dr Andrzej Szymkowiak, dr Bartłomiej Pierański, vacancy
12.	Research methods in quality science - advanced	2	30	3	dr hab. Alfred Błaszczak, prof. UEP, prof. dr hab. inż. Ryszard Cierpiszewski, prof. dr hab. inż. Anna Gliszczyńska-Świgło, dr hab. inż. Daniela Gwiazdowska, prof. UEP, dr hab. inż. Inga Klimczak, dr hab. Krzysztof Melski, prof. UEP, dr hab. inż. Katarzyna Pawlak-Lemańska, dr hab. inż. Urszula Samotyja, prof. UEP, dr hab. Ewa Sikorska, prof. UEP, dr hab. inż. Patrycja Wojciechowska
13.	Advanced microeconomics	3	30(l), 12(c)	2	dr hab. Sławomir Kalinowski, prof. UEP, prof. dr hab. Krzysztof Malaga
14.	Advanced quality science	3	30(l), 12(c)	2	dr hab. inż. Magdalena Ankiel, prof. UEP, prof. dr hab. inż. Ryszard Cierpiszewski, dr hab. inż. Alina Matuszak-Flejszman, prof. UEP, dr hab. inż. Wojciech Zmudziński, prof. nadzw. UEP, vacancy
15.	Designing research 1	1	12	1	prof. dr hab. Jan Szambelańczyk, dr hab. Beata Stępień, prof. UEP
16.	Designing research 2 +doctoral workshops	1	16	2	dr hab. Beata Stępień, prof. UEP, dr hab. Katarzyna Szarzec, prof. UEP, vacant
17.	Introduction to academic teaching	1	12	3	dr Anna Wach (Department of Education and Personnel Development)
18.	Doctoral seminar	8	74	1,2,3,4,5, 6,7,8	Supervisors of doctoral dissertations
19.	Applied statistics	3	15(l), 30 (c)	1	dr hab. Grażyna Dehnel, prof. UEP, dr Maciej Beręsewicz, dr Marcin Szymkowiak
20.	Advanced statistics	2	30	3	prof. dr hab. Elżbieta Gołata, dr Marcin Szymkowiak, vacancy
21.	Publishing workshop 1	1	8	1	dr hab. Beata Stępień, prof. UEP, vacant
22.	Publishing workshops 2	1	12	2	dr hab. Barbara Jankowska, prof. UEP, lecturers from outside PUEB, vacancy
23.	Joint lectures and classes	8	78	1,2,3,4,5, 6,7,8	Vacat, lecturers from outside PUEB, mgr Dorota Wojewoda (PUEB Library)
24.	Advanced management	3	30(l), 12(c)	2	dr hab. Milena Ratajczak-Mrozek, prof. UEP, dr Maja Sajdak



#### **4.3. List of proposed supervisors of doctoral dissertations**

A PUEB employee with the postdoctoral *doctor habilitowany* or professor degree can perform the function of a supervisor, whereas a person with the doctoral degree can be an auxiliary supervisor – with the reservation specified in Art.190(6) of the Law on Higher Education and Science of 20 July 2018.

#### **4.4. Terms of graduation from the PUEB Doctoral School**

In compliance with Art. 204 (1) of the Law on Science and Higher Education of 20 July 2018, a doctoral student completes their education with the defence of the doctoral dissertation.



## **V. Appendices**

**Curricula for the courses (Appendix 1)**

**Matrix of learning outcomes (Appendix 2)**

**Methods of testing the learning outcomes (Appendix 3)**