

**Education curriculum in SGH Doctoral School
in the field of Economics and Finance in the scope of *Economics with instruction
in English***

1. General characteristics of education

Education in the Doctoral School lasts 8 semesters and prepares for obtaining the degree of *doctor* in the field of economics and finance. The main subject of education and research shall be economics. This education involves the implementation of the education curriculum and the Individual Research Plan and shall lead to the achievement of the educational outcomes for the qualification at level 8 of the Polish Qualification Framework.

2. Educational outcomes (*knowledge, skills and social competences*)

Symbol of the educational outcome	A graduate of a doctoral programme in the field of <i>Economics with instruction in English</i> holding the degree of <i>doctor</i> :	Reference to the characteristics of the Polish Qualification Framework level 8 – code of the descriptor*
KNOWLEDGE: knows and understands		
W_1	the world-renowned output, including theoretical foundations and general problems related to the field of economics and finance	P8S_WG
W_2	the world-renowned output, including selected economics-specific problems in the extent allowing for a review of the existing paradigms	P8S_WG
W_3	key development trends of the field of economics and finance	P8S_WG
W_4	general methodology of social sciences, including the methodology of scientific research specific to the field of economics and finance	P8S_WG
W_5	the rules for popularising scientific research outcomes, also as open source and basic rules of the knowledge transfer to the economy and the social domain, including basic rules for commercialising scientific research outcomes and the know-how arising therefrom	P8S_WG P8S_WK

W_6	economic, legal and ethical conditions of the conducted scientific research	P8S_WK
W_7	fundamental dilemmas of the contemporary civilisation	P8S_WK
SKILLS: is able to		
U_1	<p>apply the knowledge from various disciplines of science for creative identifying, formulating and innovative solving of complex problems or performing research tasks, in particular:</p> <ul style="list-style-type: none"> – define the purpose and subject matter of the scientific research, formulate research hypotheses, – creatively apply and develop methods, techniques and research tools characteristic of the conducted research, – deduct based on the scientific research outcomes 	P8S_UW
U_2	perform critical analysis and assessment of scientific research outcomes, expert activity and other creative works and their contribution to the development of science in the area of the conducted research	P8S_UW
U_3	popularise scientific research outcomes or transfer them to the economy and the social domain	P8S_UK P8S_UW
U_4	communicate on specialist topics, also in a modern foreign language at a C1 level CEFR with specialists in their field of research and professional area as well as with other persons outside of these circles	P8S_UK
U_5	document and present scientific research outcomes and prepare scientific publications – according to the rules of preparing such works – respecting the principles of intellectual property protection	P8S_UK
U_6	participate in the scientific discourse	P8S_UK
U_7	initiate a debate	P8S_UK
U_8	plan and implement team research projects, also in an international environment	P8S_UO
U_9	independently plan and activate own scientific and professional and inspire and organise the development of others	P8S_UU
U_10	design and conduct classes in the area of the scientific research and professional activity run using modern methods and tools	P8S_UU

SOCIAL COMPETENCES: is ready to		
K_1	critically assess the scientific research outcomes and expert activity in the field of the prepared doctoral dissertation	P8S_KK
K_2	critically assess own contribution to the development of the scientific field in which the doctoral dissertation is prepared	P8S_KK
K_3	acknowledge the importance of knowledge in solving cognitive as well as practical problems	P8S_KK
K_4	responsibly meet social commitments of a researcher including initiating actions for the public good	P8S_KO
K_5	respect and enhance the ethos of the research community by, among others: <ul style="list-style-type: none"> – conducting scientific activity in an independent and ethical way – respecting the principle of public ownership of the scientific research outcomes accounting for the principles of intellectual property protection – conducting the opinion-forming activity in a responsible and ethical manner 	P8S_KR
K_6	think and act in an enterprising and innovative manner	P8S_KO

* Ordinance of the Minister of Science and Higher Education of 14 November 2018 on the second degree characteristics of the learning outcomes for qualification 6-8 of the Polish Qualification Framework, Journal of Laws of 2018 item 2218.

3. Education curriculum in SGH Doctoral School in the field of Economics and Finance in the scope of *Economics with instruction in English*

Education curriculum					
Groups of courses / course title	Status of the course: O – obligatory, F – facultative	Evaluation: GA – graded assignment A – assignment	Year/ Semester	ECTS credits	Number of hours
A. Research and Methods				9 - 11	74 - 94
1. Philosophy of science	O	GA	I	2	15
2. Ethics in science	O	GA	I	2	15
3. Methodology and practice of scientific research	O	GA	I	3	30
4. Research team building	O	GA	II-III	2	14
5. The art of teaching and presentation ¹	F	GA	I-III	2	20

B. Major courses^{2*}:				28	240
1. Advanced Microeconomics I or Contemporary Economic Theories of the Firm and Markets	O	GA	S1	7	60
2. Advanced Macroeconomics I or Major Trends in Contemporary Macroeconomics	O	GA	S1	7	60
3. Elective courses (2-4) from a provided list	F	GA	S2-S3	14	120
C. Elective courses:				14 – 17,5	120 - 150
1. From the provided list. Courses will be opened based on the request with minimal enrolment limits	F	GA	II-III	14 – 17,5	120 - 150
2. Electives are categorized into majors but there is no need to complete one nor to follow these suggestions, i.e. students can select courses freely in order to acquire a desired profile	F				
D. Additional:				6	60
1. Academic writing and communication	F	GA	S1	3	30
2. Guest lectures**	F	GA	S2-S8	3	30
3. Economic research seminar	F	GA	S4-S7	3	30
4. Course from the Doctoral School offer	F	GA	S4-S8	3	30
E. Doctoral Seminar	O	A	I-IV	4	60
Total				61 - 66,5	554 - 604
Individual Research Plan	O	A	II-IV		

¹ The course should be passed before doctoral candidates start their (non-obligatory) teaching apprenticeship with students.

² Major courses prepare for two major exams (see point 4.2).

*Additional courses (hours and ECTS) covered above the minimum requirement are transferred to be covered as electives (hours and ECTS).

** A slot left for guest lectures offered by visiting Professors from abroad.

LIST OF ELECTIVE COURSES

No.	Module / course title	Number of hours	ECTS credits
I. INTERNATIONAL ECONOMICS			
1	International Competitiveness	30	3.5
2	Advanced International Trade	30	3.5
3	Advanced International Business	30	3.5
4	Advanced International Finance	30	3.5
5	Corporate Finance and International Capital Markets	30	3.5
6	Regulation and Financial Supervision	60	7
II. GENERAL ECONOMICS			
1	Public Economics	30	3.5
2	Development Economics	30	3.5
3	Comparative and Institutional Economics	60	7
4	Public Policy	30	3.5
5	Socioeconomics	60	7
6	Historical Origins of Economic Thought	30	3.5
7	Experimental and Behavioral Economics	30	3.5
8	Toolkit for Applied and Empirical Economics	60	7
III. QUANTITATIVE ECONOMICS			
1	Advanced Probability and Statistics	60	7
2	Advanced Optimization	60	7
3	Advanced Econometrics	60	7
4	Advanced Microeconomics II	60	7
5	Advanced Macroeconomics II	60	7
6	Theory of Decisions	60	7
7	Advanced Game Theory	45	5
8	Advanced Industrial Organization	30	3.5
9	General Equilibrium Theory	30	3.5
10	Advanced Growth Theory	30	3.5
11	Business Cycle Analysis	30	3.5
12	Macromodelling	30	3.5
13	Monetary Economics	30	3.5
IV. POPULATION ECONOMICS			
1	Labor Economics	30	3.5
2	Qualitative and Quantitative Methods in Economic and Social Research	60	7
3	Population Economics	60	7
4	Demography and Demographic Modelling	60	7
V. (BIG) DATA ANALYSIS			
1	Mathematics	60	7
2	Optimization Methods	60	7
3	Scientific Computing Methods	45	5
4	Probability Theory for Economics	30	3.5

5	Mathematical Statistics	30	3.5
6	Bayesian Methods	30	3.5
7	Stochastic Processes	30	3.5
8	Microeconometrics	30	3.5
9	Actuarial Mathematics and Statistics	30	3.5

4. Terms and conditions of covering the education curriculum

- 4.1.** The credit term in the Doctoral School shall be the academic year and the courses included in the curriculum of a given year shall be passed with a grade. The requirements for passing a given course by the doctoral candidate shall be outlined in the course syllabus. The doctoral seminar shall be passed without a grade.
- 4.2.** The doctoral candidate shall be obliged to pass two major exams by the end of semester 4: Microeconomics and Macroeconomics. These exams shall not be included in the doctoral candidate's credit settlement of the academic year. Major courses provide preparation for major exams. The scope and form of major exams shall be outlined in the major exam cards the template of which is to be found in the annex to the education curriculum. Major exams shall be organised at least two times a year, irrelevant of the time in which major courses corresponding to them in the curriculum are covered. Major exams shall be conducted by the Examination Boards composed of 2-5 academic teachers. Passing a major exam shall exempt the doctoral candidate from attending classes in the courses corresponding to the exam in the curriculum.

5. Individual Research Plan (IPB)

- 5.1.** IPB is a compulsory element of education in the Doctoral School. IPB shall be prepared by a doctoral candidate in collaboration with the supervisor (supervisors) and the assistant supervisor, if appointed.
- 5.2.** IPB shall in particular include:
- a) outline of the doctoral dissertation
 - b) external sources of research financing,
 - c) a research plan aimed at preparing a doctoral dissertation outlining a description of tasks and a timetable of their implementation divided into semesters,
 - d) deadline for the submission of the doctoral dissertation.
- 5.3.** The doctoral candidate shall submit his/her IPB - after obtaining approval of the assistant supervisor, if appointed, and later after obtaining the approval of the supervisor (supervisors) - to the Dean not later than within 12 months of starting the programme in the Doctoral School.

6. Completing education in the Doctoral School

- 6.1.** A basis for completing education in the Doctoral School shall be obtaining the learning outcomes for the qualification level 8 of the Polish Qualification Framework and complying with the conditions stipulated in art. 189 of the act and stipulated pursuant to art. 192.2 and 3 of the act.
- 6.2.** At a request of a person who has not completed education in the Doctoral School, a certificate of the study record shall be issued.

Annex

TEMPLATE OF THE MAJOR EXAM CARD

Name of the education curriculum		
Name of the major exam		
<i>Name of the exam</i> in English		
Authors of the major exam card	1.	
Exam form	e.g. written exam	60%
	e.g. spoken exam	40%
Exam scope		
1.	Problem 1:	
Basic literature		
1.		
Supplementary literature		
1.		
Name of the major course corresponding in the curriculum to the major exam		
1.		