

Education Program at the Doctoral School of the Nicolaus Copernicus Superior School in the discipline of Medical Sciences in the academic year 2024/2025

General Assumptions:

1. The doctoral education program in the field of medical sciences at the Doctoral School (SD) of the Nicolaus Copernicus Superior School (SGMK) complies with the provisions of the Law on Higher Education and Science (Journal of Laws 2018, item 1668) and leads to the achievement of learning outcomes at level 8 of the Polish Qualifications Framework.
2. Doctoral education in the field of medical sciences at SD SGMK lasts for 6 semesters.
3. Education is based on the education program announced for a given academic year and an individual research plan (IPB) prepared by the doctoral student together with the supervisor, co-supervisor, or assistant supervisor.
4. Didactic classes are conducted in stationary or remote form using teleinformatics platforms.
5. The language of instruction is Polish and English.
6. During the education at SD SGMK, doctoral students in the field of medical sciences are required to complete classes totaling a minimum of 40 ECTS points, of which 25 ECTS points must be completed by the end of the second semester of study.
7. A doctoral student may complete the education program by participating in training sessions, courses, and summer schools organized by entities other than SGMK. The maximum scope of subjects completed in this way cannot exceed 5 ECTS points throughout the academic year.
8. Program kształcenia doktorantów w dyscyplinie nauk medycznych w Szkole Doktorskiej (SD) Szkoły Głównej Mikołaja Kopernika (SGMK) jest zgodny z przepisami Ustawy Prawo o Szkolnictwie Wyższym i Nauce (Dz.U. 2018 poz. 1668) oraz prowadzi do uzyskania efekty uczenia na poziomie 8. Polskiej Ramy Kwalifikacji.
9. Kształcenie doktorantów w dyscyplinie nauk medycznych w SD SGMK trwa 6 semestrów.
10. Kształcenie odbywa się w oparciu o program kształcenia ogłaszany na dany rok akademicki oraz indywidualny plan badawczy (IPB) przygotowywany przez doktoranta wraz z promotorem, ko-promotorem lub promotorem pomocniczym.
11. Zajęcia dydaktyczne realizowane są w formie stacjonarnej lub zdalnej za pomocą platform teleinformatycznych.
12. Językiem prowadzenia zajęć jest język polski oraz język angielski.
13. W toku kształcenia w SD SGMK doktoranci w dziedzinie nauk medycznych są zobowiązani do realizacji zajęć równych minimalnie 40 punktom ECTS, w tym 25 punktów ECTS musi być zrealizowane do końca II semestru nauki.

14. Doktorant może realizować program kształcenia poprzez uczestnictwo w szkoleniach, kursach oraz szkołach letnich organizowanych przez inne podmioty niż SGMK. Maksymalny wymiar realizowanych w ten sposób przedmiotów nie może przekroczyć 5 punktów ECTS w całym roku kształcenia.

Learning Outcomes:

No.	Symbol	Graduate of the SD in Medical Sciences with a doctoral degree:	Description component code
KNOWLEDGE, the doctoral student / graduate knows and understands:			
1.	W_1	to an extent allowing for the revision of existing paradigms - global achievements including theoretical foundations and general issues as well as selected specific issues relevant to the scientific discipline in which the doctoral dissertation is prepared	P8S_WG
2.	W_2	the main developmental trends in the discipline in which the doctoral dissertation is prepared	P8S_WG
3.	W_3	the methodology of scientific research	P8S_WG
4.	W_4	fundamental dilemmas of contemporary civilization	P8S_WK
5.	W_5	economic, legal, ethical, and other significant conditions of scientific activity	P8S_WK
SKILLS, the doctoral student / graduate is able to:			
1.	U_1	<p>use knowledge from various fields of science for creative identification, formulation, and innovative solving of complex problems or tasks, especially:</p> <ul style="list-style-type: none"> • define the aim and subject of scientific research, formulate a research hypothesis • develop research methods, techniques, and tools, and creatively apply them • educe from the results of scientific research 	P8S_UW
2.	U_2	critically analyze and evaluate the results of scientific research, expert activity, and other creative works as well as their contribution to the development of knowledge in the area of conducted research	P8S_UW
3.	U_3	transfer the results of scientific activity to the economic and social sphere	P8S_UW
4.	U_4	communicate on specialized topics to enable active participation in the international scientific community	P8S_UK

5.	U_5	disseminate the results of scientific activity also in popular forms	P8S_UK
6.	U_6	initiate debate	P8S_UK
7.	U_7	participate in scientific discourse	P8S_UK
8.	U_8	plan and carry out individual and team research projects, also in the international environment P8S_UO	
1.	K_1	critically assess the achievements within the scientific discipline in which the doctoral dissertation is prepared	P8S_KK
2.	K_2	critically assess their own contribution to the development of the scientific discipline in which the doctoral dissertation is prepared	P8S_KK
3.	K_3	acknowledge the importance of knowledge in solving cognitive and practical problems	P8S_KK
4.	K_4	fulfill the social obligations of researchers	P8S_KO
5.	K_5	initiate actions for the public good	P8S_KO
6.	K_6	maintain and develop the ethos of research environments through: - conducting scientific activity independently and in accordance with social values - respecting the principle of public ownership of the results of scientific activity, taking into account the principles of intellectual property protection	P8S_KR

Graduate Competencies:

The graduate of SD SGMK in the field of medical sciences possesses the following competencies:

1. A general overview of theoretical knowledge and research status in the field of medical sciences and health sciences, with particular emphasis on research related to the topic of the doctoral dissertation being pursued.
2. Methodological knowledge and hard skills related to using the research toolkit necessary for conducting a doctoral dissertation.

- Soft skills related to using the research toolkit, including building and planning one's own academic career, scientific communication, preparing grant applications, and managing a research project.

Description of the Education Program:

The subjects comprising the SD SGMK education program in the field of medical sciences consist of three blocks:

- Mandatory subjects in the scope of conducted research methodology
- Mandatory subjects in the scope of soft skills of a researcher
- Optional subjects in the scope of specialized knowledge and skills.
- Individual work of the doctoral student with the supervisor

The participation of doctoral students in classes of all subjects belonging to blocks A and B is mandatory and should be completed by the end of the second semester of education. Within block C, the doctoral student selects subjects in which they would like to participate based on the list of subjects proposed by SD. The completion of block C is planned for the III, IV, V, and VI semesters of education. The doctoral student is required to complete a minimum of two subjects from block C per semester. The list of subjects available in a given semester is provided to doctoral students at least two weeks before the start of the semester. Block D is conducted in the form of individual workshops with the supervisor, totaling 25 hours per semester.

EDUCATION PROGRAM

No.	Subject	Semester	Number of ECTS	Hours
Mandatory subjects in the scope of conducted research methodology				
	Introduction to biomedical research methodology	I-II	50 (25 C + 25 PI)	2
	Ethical and legal aspects of biomedical research	I-II	50 (25 C + 25 PI)	2
	Bibliographic databases and literature review	I-II	25 (10 C + 15 PI)	1
	Statistical inference and introduction to biostatistics	I-II	100 (50 C + 50 PI)	4
	Intellectual property protection	I-II	25 (10 C + 15 PI)	1
B. Mandatory subjects in the scope of soft skills of a researcher				
	Researcher's portfolio and career planning	I-II	25 (10 C + 15 PI)	1
	Writing scientific texts and scientific communication	I-II	75 (30 C + 45 PI)	3

	Financing of scientific research and preparation of grant applications	I-II	50 (25 C + 25 PI)	2
	AI tools in the researcher's toolkit	I-II	25 (10 C + 15 PI)	1
	Biomedical data management	I-II	25 (10 C + 15 PI)	1
	Preparation of the Individual Research Plan	I-II	25 (5 C + 20 PI)	1
C. Optional subjects in the scope of specialized knowledge and skills				
	Subject to choose (1)	III	75 (30 C + 45 PI)	3
	Subject to choose (2)	III	75 (30 C + 45 PI)	3
	Subject to choose (3)	IV	75 (30 C + 45 PI)	3
	Subject to choose (4)	IV	75 (30 C + 45 PI)	3
	Subject to choose (5)	V	75 (30 C + 45 PI)	3
	Subject to choose (6)	V	75 (30 C + 45 PI)	3
	Subject to choose (7)	VI	75 (30 C + 45 PI)	3
	Subject to choose (8)	VI	75 (30 C + 45 PI)	3
D. Individual work of the doctoral student with the supervisor				
	Individual workshops with the supervisor	I-VI	150 (150 C + 0 PI)	6

Abbreviations: C – contact hours, PI – individual work of the doctoral student