**RESOLUTION OF THE WSB UNIVERSITY SENATE**

**No 3/2024/2025 of 18 December 2024**

**on establishing the curriculum at the WSB University Doctoral School**

Acting pursuant to § 28 sec. 1 (12) of the Act of 20 July 2018 Law on Higher Education and Science (Journal of Laws of 2018 No 1668 as amended) and § 9 sec. 6 (10) of the WSB University Statute of 26 October 2021, as amended, the Senate shall resolve as follows:

§ 1

The curriculum at the WSB University Doctoral School conducted:

1) in the fields of:
    a) social sciences in the discipline of management and quality studies,
    b) social sciences in the discipline of educational sciences,
    c) social sciences in the discipline of security studies,
    d) engineering and technical sciences in the discipline of civil engineering, geodesy and transport,
2) in Polish and English;

has been approved for those commencing education in the academic year 2025/2026, which is Annex 1 hereto.

§ 2

The resolution shall enter into force on the day of its adoption.

Chairman of the WSB University Senate

RECTOR

Assoc. Prof. Zdzisława Dacko-Pikiewicz, PhD

# CURRICULUM AT THE WSB UNIVERSITY DOCTORAL SCHOOL

## 1. GENERAL DESCRIPTION

Name: Doctoral School

Field of: **social sciences**

Scientific discipline: **Management and quality studies, Educational sciences, Security studies**

Field of: **engineering and technical sciences**

Scientific discipline: Civil engineering, geodesy and transport

Form: On-site

Duration: **8 semesters**

Language of instruction: **Polish, English**

## 2. General information

The Doctoral School offers programmes to doctoral students in the following scientific disciplines:

- Management and quality studies
- Educational sciences
- Security studies
- Civil engineering, geodesy and transport

The WSB University Doctoral School aims to create conditions for:

- conducting independent scientific research by doctoral students, also outside the unit offering education,
- scientific cooperation in international research teams,
- participating in international research projects,
- preparing scientific publications by the doctoral student,
- writing a doctoral dissertation under the supervision of a supervisor or a supervisor and an auxiliary supervisor.

As part of the WSB University Doctoral School, it is possible to implement the programme of the Industrial doctorate, within which the University's cooperation with the socio-economic environment is developed. The subject of the programme is the training of doctoral students in consultation with the companies employing them and their support in the preparation of

a doctoral dissertation, the results of which will apply to the activity of a given company and improve its functioning.

### 3. A list of learning outcomes

In the course of the education process, the doctoral student obtains learning outcomes for qualifications at the PQF (Polish Qualifications Framework) level 8 in accordance with the Regulation of the Minister of Science and Higher Education of 14 November 2018 on the characteristics of the second-degree learning outcomes for qualifications at levels 6-8 of the Polish Qualifications Framework - Level 8 PQF. These outcomes are shown in Table 1.

Table I. Learning outcomes for PQF level 8 qualifications

| No. of Learning outcomes | Learning outcomes of the Doctoral School programme at WSB Academy | Reference to the second-degree characteristics of PQF level 8** | Symbol |
|---|---|---|---|
| **KNOWLEDGE** | | | |
| 1.SzD_W01 | knows and understands global achievements, to the extent that existing paradigms can be revised, covering theoretical foundations, general issues and selected specific issues relevant to a given scientific or artistic discipline, in which the programme is conducted, i.e. Management and Quality Sciences/ Pedagogy/ Safety Sciences/ Civil Engineering, Geodesy and Transport | knows and understands global achievements, to the extent that existing paradigms can be revised, covering theoretical foundations, general issues and selected specific issues relevant to a given scientific or artistic discipline | P8S_WG01 |
| 2.SzD_W02 | knows and understands the main development trends of the scientific or artistic disciplines which education refers to | knows and understands the main development trends of the scientific or artistic disciplines which education refers to; | P8S_WG02 |
| 3.SzD_W03 | knows and understands the methodology of scientific research | knows and understands the methodology of scientific research | P8S_WG03 |
| 4.SzD_W04 | knows and understands the principles of the dissemination of scientific results, also in open access mode | knows and understands the principles of the dissemination of scientific results, also in open access mode | P8S_WG04 |

| | | | |
|---|---|---|---|
| 5.SzD_W05 | knows and understands the fundamental social and technological dilemmas of modern civilisation | knows and understands the fundamental dilemmas of modern civilisation | P8S_WK01 |
| 6.SzD_W06 | knows and understands the economic, legal, ethical conditions of the scientific activity | knows and understands the economic, legal and other relevant conditions of the scientific activity | P8S_WK02 |
| 7.SzD_W07 | knows and understands the core principles of knowledge transfer to economic and social spheres, including the basic principles of commercialisation of scientific results and related know-how | knows and understands the core principles of knowledge transfer to economic and social spheres and commercialisation of scientific results and related know-how | P8S_WK03 |
| **SKILLS** | | | |
| 1.SzD_U01 | can use knowledge from various fields of science to creatively identify, formulate and innovatively solve complex problems or perform research tasks, and in particular define a research objective and subject, formulate a research hypothesis, develop research methods, techniques and tools and creatively apply them, and infer from research results | can use knowledge from various fields of science to creatively identify, formulate and innovatively solve complex problems or perform research tasks, and in particular define a research objective and subject, formulate a research hypothesis, develop research methods, techniques and tools and creatively apply them, and infer from research results | P8S_UW01 |
| 2.SzD_U02 | can critically analyse and evaluate research results, expert activities and other creative works and their contribution to the development of knowledge | can critically analyse and evaluate research results, expert activities and other creative works and their contribution to the development of knowledge | P8S_UW02 |
| 3.SzD_U03 | can transfer the results of the scientific activity to economic and social spheres | can transfer the results of the scientific activity to economic and social spheres | P8S_UW03 |
| 4.SzD_U04 | can talk about specialist topics to an extent that enables active participation in the international scientific community | can talk about specialist topics to an extent that enables active participation in the international scientific community | P8S_UK01 |

| | | | |
|---|---|---|---|
| 5. SzD_U05 | can disseminate research results, also in popular forms | can disseminate research results, also in popular forms | P8S_UK02 |
| 6. SzD_U06 | can initiate a debate | can initiate a debate | P8S_UK03 |
| 7. SzD_U07 | can participate in scientific discourse | can participate in scientific discourse | P8S_UK04 |
| 8. SzD_U08 | can use a foreign language at B2 level of the European Common Reference Framework for Languages to a degree that allows participation in the international scientific and professional community | can use a foreign language at B2 level of the European Common Reference Framework for Languages to a degree that allows participation in the international scientific and professional community | P8S_UK05 |

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|---|---|---|---|
| 9. SzD_U09 | can plan and implement individual and team research, also in an international environment | can plan and implement individual and team research or creative projects, also in an international environment | P8S_UO01 |
| 10. SzD_U10 | can independently plan and act for his or her own development and inspire others and organise the development of others | can independently plan and act for his or her own development and inspire others and organise the development of others | P8S_UU01 |
| 11. SzD_U11 | can plan and implement individual and team research or creative projects, also in an international environment | can plan and implement individual and team research or creative projects, also in an international environment | P8S_UU02 |
| **SOCIAL COMPETENCES** | | | |
| 1.SzD_K01 | is ready to independently conduct research that expands on existing scientific achievements and take on challenges in the professional and public spheres, taking into account: their ethical dimension; responsibility for their consequences; and shaping models of appropriate behavior in such situations | is ready to support and develop the ethos of the research and creative communities, also conduct scientific activities independently | P8S_KR01 |
| | | is ready to fulfill the social obligations of researchers and creators | P8S_KO01 |
| | | is ready to initiate public interest actions | P8S_KO02 |
| | | is ready to think and act in an entrepreneurial way | P8S_KO03 |
| | is ready to critically evaluate the | is ready to critically evaluate achievements within a given scientific or artistic discipline | P8S_KK01 |

| | | | |
|---|---|---|---|
| 2.SzD_K02 | achievements of the scientific discipline they represent and their own contribution to its development, as well as to recognize the role of knowledge in solving cognitive and practical problems | is ready to critically assess his or her contribution to the development of a given scientific or artistic discipline | P8S_KK02 |
| | | is ready to recognise the importance of knowledge in solving cognitive and practical problems | P8S_KK03 |
| 3.SzD_K03 | is ready to support and develop the ethos of research and creative communities, also respect the principle of the public ownership of research results, taking into account the principles of intellectual property protection | is ready to support and develop the ethos of research and creative communities, also respect the principle of the public ownership of research results, taking into account the principles of intellectual property protection | P8S_KR02 |

## 4. The schedule of education at the Doctoral School

The schedule of education is spread over four years (eight semesters) and is divided into six thematic modules (blocks) in which lectures, seminars, training sessions or topical workshops are held. The curriculum includes general subjects, common to all doctoral students, as well as modules of specialised subjects, separate for each scientific discipline in which the doctoral dissertation is written. Specification is required for each scientific discipline. It will mean naming each subject which takes into account the specificity of a given scientific discipline.

Module I Research methodology and research work

Subjects within Module I are designed to provide doctoral students with advanced methodological and research knowledge, allowing them to acquire knowledge of research methods, techniques, tools, and the ability to use them in solving a scientific problem. It should be emphasized that this module includes elective classes, the subject of which will be determined according to the scientific discipline in which the doctoral dissertation is written.

Table 2 “Curriculum at the WSB University Doctoral School” includes the list of subjects in Module I.

As part of Module I, a doctoral student should:

- take part in classes in accordance with the schedule presented at the beginning of each semester,
- prepare, under the supervision of a research supervisor, the outline of the doctoral dissertation and an Individual Research Plan (IRP) together with scientific activities planned in the IRP,

- prepare information on the assessment of progress in the implementation of the IRP by the end of each year of education**,** which will be part of the annual report submitted by the University to the Ministry of Science and Higher Education (if the doctoral student pursues the industrial doctorate programme).

Module II Academic Skills

Subjects in Module II (Table 2) aim to enable doctoral students to acquire skills related to the analysis and synthesis of scientific achievements in the field of sub-discipline (sub-disciplines) in which the scientific problem is located, to identify new elements in the achievements as a basis for using knowledge and exchanging experiences in the scientific environment, as well as to master basic communication skills on topics related to the scientific problem being solved.

As part of Module II, a doctoral student should:

- learn skills that constitute his or her scientific workshop, including the use of research methods, the principles of preparing scientific texts, participation in scientific sessions or conferences or the professional presentation of his/her research results, the presentation of his/her scientific views, and the preparation of research projects,
- learn skills of establishing interpersonal contacts, with particular emphasis on the international scientific community,,

Module III Elective subjects

Module III subjects (Table 2) are determined by the doctoral student in consultation with his/her research supervisor. The set of subjects in this module includes seminar discussion, preparation and conduct of one's own grant project, participation in a foreign summer school or research internship abroad.

As part of Module III, a doctoral student should:

- select such classes or activities that, in the opinion of the doctoral student and his/her research supervisor, constitute further development of his/her scientific and research workshop in the field of knowledge, skills and social competences and are relevant to the doctoral student's special interests or predispositions.

select such classes or activities that, in the opinion of the doctoral student and his/her research supervisor, constitute further development of his/her scientific and research workshop and are conducted in English, as part of the Doctoral School's offer. During the programme, doctoral students should complete a minimum of 16 hours of additional classes.

Module IV Social Competences

Subjects in this block (Table 2) complement the doctoral student's qualifications with a specific type of competences important in scientific work, which are social competences. These will include the doctoral student's readiness for independent research enhancing current scientific achievements, taking up challenges in professional and public spheres taking into account their ethical dimension and responsibility for their consequences, as well as shaping the models of proper conduct in such situations. The areas where these competences will be built include interpersonal communication, teamwork, the art of discussion or stress management and improving mental toughness.

As part of Module IV, a doctoral student should:

- develop social competences important in scientific work, which will consist of realistically identified activities and behaviours of the doctoral student based on known patterns of activities and behaviours,,
- develop the competences related to fulfilling the social obligations assumed by doctoral students as researchers of scientific problems, including initiating activities for the public interest or maintaining and developing the ethos of research communities.

Module V Internship

This module (Table 2) will consist of 40 hours of conducting classes carried out during the programme at the Doctoral School.

For the interim evaluation, the doctoral student fulfils the intership requirement by observing classes, preparing teaching materials, and participating in the student evaluation process, for a total of 20 hours.

The maximum teaching load for a doctoral student may not exceed 80 hours during the entire programme.

As part of Module V, a doctoral student should:

- conduct classes in accordance with the highest methodological standards,
- use, as far as possible, the results of their scientific research in the course of classes,
- verify knowledge, skills and social competences acquired in the course of education at the Doctoral School.

Module VI Doctoral Seminars

Classes in this block (Table 2) will include two forms of seminars. The first is pro-seminars, the subject of which will include defining the formal and substantive requirements of the doctoral dissertation, indicating the rights and obligations of the doctoral student or describing the scientific discipline in which the doctoral dissertation is written. The second form is an individual doctoral

seminar with a research supervisor –expert tutoring.

As part of Module VI, a doctoral student should:

- work on the scientific problem diligently and reliably, respecting knowledge, skills and social competences acquired by the doctoral student,
- cooperate with the research supervisor in solving partial scientific problems,
- carry out all scientific tasks set out in the Individual Research Plan and in the course of consultation with the research supervisor.

Other forms of support for doctoral students in the course of education

Each doctoral student of the Doctoral School is covered by a special support programme, which covers all four years of study. It consists of the following projects:

- participation, regardless of subjects as part of the education plan, in obligatory consultation meetings for doctoral students devoted, in the first year of education, to information on the state of implementation of tasks resulting from the Individual Research Plan and the schedule of research activities, the degree of advancement of work on the outline of the doctoral dissertation and the state of preparation of the scientific article.

  The purpose of these meetings is primarily to determine support for those doctoral students who declare problems related to their scientific tasks. At subsequent meetings of the first year, doctoral students present the outline of the doctoral dissertation so as to improve their substantive and methodical content in accordance with the comments made. These activities should result in the presentation of the outline of the doctoral dissertation presented at an open meeting of employees of the Department of a given scientific discipline in which the doctoral dissertation is written,
- the preparation of information on the assessment of progress in the implementation of the IRP by each doctoral student by the end of each year of education, which is then part of the annual report sent by the University to the Ministry of Science and Higher Education (if the doctoral student pursues the industrial doctorate programme),
- participation, regardless of the activities carried out as part of the education plan, in one (if necessary, there may be more) obligatory consultation meeting for doctoral students from the second to the last year of studies, in each semester of education. The meeting is devoted to information on the state of implementation of tasks resulting from the Individual Research Plan and the schedule of research activities and the degree of advancement of work on the doctoral dissertation. The purpose of these

meetings is primarily to determine support forms for those doctoral students who declare problems related to their scientific tasks.

At the same time, after the second year of studies, each doctoral student is subject to an interim evaluation. The committee for the interim evaluation of doctoral students at the Doctoral School, in the course of work specified in separate Regulations, gives a positive or negative result. The latter results in removal from the list of doctoral students.

**5. The methods of passing individual modules:**

1) Obtaining a credit in a series of lectures, training sessions, seminars or topical workshops offered in a given semester of study,
2) preparation and submission of an application for research funding in a national or international competition, the planned manager of which is a doctoral student applying for credit,
3) co-authorship in a scientific article published in a scientific journal,
4) active participation in an international conference (the presentation of a paper the author or co-author of which is a doctoral student applying for credit),
5) participation in a course or training which develops professional competences, including the so-called soft competences (project management, teamwork, coping with stress, etc.); the hourly duration of classes may not be less than planned in the Doctoral School programme,
6) participation in a course or training which develops teaching skills (e.g. the art of public speaking, etc.),
7) supervision or assistance in organising the work of the science club, documented by the opinion of the supervisor of the science club,
8) participation in a foreign or national research or industrial internship of at least two weeks.

Doctoral students may apply for an indication of a different form of crediting classes than specified above. This will depend on the decision of the Head of the WSB University Doctoral School.

**Final remarks**

In disputed matters and not regulated by this education programme at the Doctoral School, decisions are made by the Dean of the Faculty of Applied Sciences of WSB University.

Table 2. Curriculum at the WSB University Doctoral School

| Subject | Form of credit | Total number of hours | ECTS credits | HOURS IN SEMESTERS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | I | II | III | IV | V | VI | VII | VIII |
| **Research methodology and work** | | **116** | **14** | | | | | | | | |
| Methodology of sciences | Credit with a grade | 24 | 3 | 8 | 8 | 8 | | | | | |
| Individual research plan - doctoral workshops | Pass | 20 | 2 | 10 | 10 | | | | | | |
| The concept of creating doctoral dissertations | Pass | 8 | 1 | 8 | | | | | | | |
| Quantitative research methods | Credit with a grade | 16 | 2 | | 8 | 8 | | | | | |
| Qualitative research methods | Credit with a grade | 16 | 2 | | 8 | 8 | | | | | |
| Mixed methods in scientific research | Credit with a grade | 16 | 2 | | | 8 | 8 | | | | |
| Development and interpretation of quantitative data | Pass | 8 | 1 | | | | | 8 | | | |
| Development and interpretation of qualitative data | Pass | 8 | 1 | | | | | 8 | | | |
| **Academic skills** | | **186** | **20** | | | | | | | | |
| Subjects within a given scientific discipline | Credit with a grade | 52 | 5 | 10 | 10 | 16 | 16 | | | | |
| Formal and legal aspects of doctoral studies | Pass | 8 | 1 | 8 | | | | | | | |
| Ethics of scientific research | Pass | 8 | 1 | 8 | | | | | | | |
| Researcher's workshop - the art of writing and publishing a scientific article | Pass | 8 | 1 | | | 8 | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Practical workshop - writing applications for research grants | Pass | 8 | 1 | | | 8 | | | | | |
| Digital tools and technologies in research | Pass | 8 | 1 | 8 | | | | | | | |
| Systematic review of literature in scientific research | Pass | 6 | 1 | | 6 | | | | | | |
| Methods of verifying and evaluating learning outcomes | Pass | 8 | 1 | | | | 8 | | | | |
| Forum for the presentation of doctoral theses | Pass | 24 | 2 | | | | 4 | 4 | 4 | 8 | 4 |
| Preparation for the defence of the doctoral dissertation | Pass | 8 | 1 | | | | | | | 4 | 4 |
| Participation in the scientific session of doctoral students (a speech or a poster) / Scientific conferences | Pass | 32 | 3 | | 8 | | 8 | | 8 | | 8 |
| Lectures by visiting professors | Pass | 16 | 2 | | | | | 4 | 4 | 4 | 4 |
| **Social competences** | | **40** | **5** | | | | | | | | |
| Setting and achieving scientific objectives | Pass | 8 | 1 | 8 | | | | | | | |
| Interpersonal communication | Pass | 8 | 1 | | 8 | | | | | | |
| Teamwork | Pass | 8 | 1 | | | | | 8 | | | |
| The art of discussion | Pass | 8 | 1 | | | | | 8 | | | |
| Stress management and improving mental toughness | Pass | 8 | 1 | | | | | | 8 | | |
| **Internship** | **minimum 40h (max. 80h)** | **40** | **4** | | | | | | | | |
| Conducting classes | Pass | 40 | 4 | | 10 | | 10 | | 10 | 10 | |
| **Doctoral seminar** | | **48** | **4** | | | | | | | | |
| Doctoral pro-seminar | Pass | 8 | 1 | 8 | | | | | | | |
| Individual doctoral seminar with a research supervisor – expert tutoring | Pass | 40 | 3 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 |

| **Classes in English** | **Min. 16h (max. 128h)** | **ogółem** | **2** | **I** | **II** | **III** | **IV** | **V** | **VI** | **VII** | **VIII** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methodology of Research | | 16 | | | | | 8 | 8 | | | |
| Quantitative Methods in Research | | 16 | | | | | 8 | 8 | | | |
| Qualitative Methods in Research | | 16 | | | | | 8 | 8 | | | |
| The Scientific Problem and the Principles of its Formulation | | 8 | | 8 | | | | | | | |
| Formulation of Hypotheses | | 8 | | | 8 | | | | | | |
| Data Analysis Using SPSS Software, PS IMAGO | | 16 | | | | 8 | 8 | | | | |
| Modern Teaching Methods and Techniques | | 8 | | 4 | 4 | | | | | | |
| Research Ethics | | 8 | | 8 | | | | | | | |
| Researcher's Workshop - The Art of Writing a Scientific Article | | 8 | | | 4 | 4 | | | | | |
| Researcher's Workshop - Public Speaking | | 8 | | | 4 | 4 | | | | | |
| Practical Workshop for Writing Research Grant Applications | | 8 | | | | 4 | 4 | | | | |
| Use of Databases and Scientific Data Acquisition | | 8 | | 8 | | | | | | | |
| Building A Scientist's Personal Brand | | 8 | | | | | 4 | 4 | | | |
| **TOTAL** | | **446** | **49** | 80 | 80 | 68 | 58 | 46 | 40 | 32 | 26 |
| **Elective subjects** | | | | | | | | | | | |
| Participation in research work at university | | | | | | | | | | | |
| Preparation and management of one's own grant project | | | | | | | | | | | |
| Participation in a summer school | | | | | | | | | | | |
| Research internship abroad | | | | | | | | | | | |