

**Extract of the recruitment rules for the Doctoral School of  
the Wrocław University of Science and Technology for the academic year 2024/2025**

**Recruitment rules for discipline: mathematics**

*NOTE: The document contains an excerpt of the rules of recruitment to the Doctoral School of the Wrocław University of Science and Technology for the academic year 2024/2025 specific for one discipline. The full text is available at:*

*<https://szd.pwr.edu.pl/en/for-candidates>.*

**§ 1**

1. The Wrocław University of Science and Technology (hereinafter referred to as the "University") has one doctoral school, hereinafter referred to as the "Doctoral School", in the following educational disciplines, in which the university is authorized to award the academic degree of doctor:

- 1) architecture and urban planning,
- 2) automation, electronic, electrical engineering and space technologies,
- 3) information and communication technology,
- 4) biomedical engineering,
- 5) chemical engineering,
- 6) civil engineering, geodesy and transport,
- 7) materials engineering,
- 8) mechanical engineering,
- 9) environmental engineering, mining, and energy,
- 10) mathematics,
- 11) chemical sciences,
- 12) physical sciences,
- 13) management and quality studies.

2. Doctoral education is not be subject to fees.

## **§ 2**

1. Recruitment to the Doctoral School takes place in educational disciplines through a competition and is based on a point system.
2. Recruitment to the Doctoral School is associated with the payment of a one-off, non-returnable recruitment fee for considering the application for admission to the Doctoral School. The amount of the recruitment fee and the rules for its payment are determined by the Rector.

## **§ 3**

A person holding M.Sc. degree or an equivalent degree, or in exceptional cases, justified by the highest quality of scientific achievements, a person who completed first-cycle studies (bachelor), or who completed the third year of uniform studies (long-cycle master studies) may be admitted to the Doctoral School.

## **§ 4**

1. Persons, including foreigners, may apply for admission to the Doctoral School if:
  - 1) has the professional title of magister (M.Sc.), magister inżynier or an equivalent, or
  - 2) obtained the highest quality of scientific achievements and is a graduate of first-cycle studies or a student who has completed the third year of uniform master's studies, or
  - 3) have a diploma confirming completion of studies abroad (outside Poland), giving the right to apply for the PhD degree in the country in which the University that issued the diploma operates.
2. A person who does not have the qualifications described in sec. 1 on the day of submitting the recruitment documents, must obtain them and confirm them with an appropriate document until the end of the recruitment procedure specified in the recruitment procedure schedule.

## **§ 5**

To be admitted to the Doctoral School, knowledge of the English language is required, confirmed by a certificate or diploma of completion of studies at least B2 level. The list of certificates and diplomas confirming the knowledge of the English language at the required level is provided in Appendix 1.

## **§ 6**

1. The number of places for persons who will be admitted to the Doctoral School in individual twelve educational disciplines is set by the Rector.
2. The recruitment schedule is set by the Rector.
3. If the number of qualified candidates in the educational discipline is lower than the number of places referred to in sec. 1, the Rector, at the request of the Dean of the Doctoral School, may

consent to additional recruitment in this educational discipline in accordance with the schedule referred to in sec. 2.

## **§ 7**

The detailed rules considering the conditions and procedure of recruitment to the Doctoral School based on the point system are set out in § 22-26.

## **§ 8**

1. Before registering in the recruitment system, a candidate for the Doctoral School is obliged to:
  - 1) select a potential supervisor employed in Wrocław University of Science and Technology from the list of supervisors for a discipline available on the website of the Doctoral School: <https://szd.pwr.edu.pl/>;
  - 2) have a conversation with the potential supervisor regarding the initial concept of the doctoral dissertation;
  - 3) get the consent of the potential supervisor to undertake the supervision, together with the declaration of the person in charge of an organizational unit of the faculty (head of a department or director of an institute), where the doctoral dissertation would be conducted on the provision of required research resources for the duration of the doctoral dissertation in the event of admission to the Doctoral School.
2. In justified cases, with the consent of the Dean of the Doctoral School, a candidate to the Doctoral School may, instead of a potential supervisor, appoint a potential assistant supervisor from among the University's employees. The provisions of sec. 1 points 2-3 shall apply accordingly.

## **§ 9**

The condition for considering the application for admission to the doctoral school is:

- 1) prior contact with a potential supervisor in order to obtain the documents referred to in § 9 sec. 3;
- 2) registering in the recruitment system;
- 3) filling in the candidate's card in the university's recruitment system;
- 4) delivering a set of documents referred to in § 11 within the time limit stated in the recruitment schedule and making the recruitment fee referred to in § 2 sec. 2.

## **§ 10**

1. Candidates with special needs are provided - upon their request - with support to equalize opportunities in the recruitment process according to their individual needs.
2. The application referred to in sec. 1 should be submitted to the Dean of the Doctoral School no later than on the last day of accepting documents from candidates for the Doctoral School specified in the recruitment procedure schedule.

3. If a special need arises after the deadline referred to in sec. 2, the candidate may submit to the Dean of the Doctoral School the application referred to in sec. 1 to the Dean of the Doctoral School, and support to equalize opportunities will be provided if possible.

## **§ 11**

1. The candidate for the Doctoral School submits the following documents by the date specified in the recruitment procedure:

- 1) candidate's card for the Doctoral School referred to in § 21;
- 2) CV;
- 3) diploma confirming obtaining the professional title of master, master engineer or an equivalent, and in the case of persons referred to in § 4 sec. 2, the candidate's declaration confirmed by the dean's office about completing the second-cycle study program and the planned date of graduation before the announced date completion of recruitment. However, in the case of people who show the highest quality of scientific achievements, a document confirming the completion of first-cycle studies or a document confirming that the candidate is a student who has completed the third year of uniform long-cycle master studies;
- 4) a diploma supplement in first and second cycle studies or uniform studies;
- 5) CGPA (Culmulative Grade Point Average) for first and second cycle studies or for long-cycle master studies (transcript of records). In the case of the last semester of studies not yet completed, the grades from all semesters of studies, excluding the last semester, are included in the average result. In the absence of a certificate of the obtained a CGPA, issued by the university, the candidate shall submit a signed declaration with CGPA calculated by himself/herself. Candidates who completed their studies outside Poland, along with the obtained CGPA, should also attach the grading scale applicable in the country in which they graduated;
- 6) photo (electronic version);
- 7) a synthetic presentation of achievements regarding the candidate's scientific activity or research and development activities in accordance with the template specified for the selected educational discipline available on the website of the Doctoral School: <https://szd.pwr.edu.pl/>;
- 8) statement of the potential supervisor on undertaking the supervision, together with the declaration of the person in charge of an organizational unit of the faculty (head of a department or director of an institute), in which the doctoral dissertation would be carried out on the provision of a required research resources for the duration of the doctoral dissertation with admission to the Doctoral School;
- 9) description of the initial concept of the doctoral dissertation under § 24 approved by the potential supervisor (no longer than 2 A4 pages);

10) document confirming the command of the English language at B2 level (diploma supplement or certificate of the grade obtained from the language course at B2 level, language certificate or other document compliant with Appendix 1);

2. A candidate with a diploma or other document confirming completion of studies outside Poland shall submit a copy of the diploma entitling to apply for admission to the Doctoral School containing an apostille or legalization certified by the Wrocław University of Science and Technology (for certification, the original of the relevant diploma must be submitted for inspection).

## **§ 12**

1. The recruitment procedure, including interviews to the Doctoral School, is conducted by recruitment committees for the educational discipline appointed by the Dean of the Doctoral School.

2. If one member of the recruitment committee is a potential supervisor previously indicated by the candidate, she or he will not take part in the evaluation of that candidate.

3. Information on recruitment, including the number of places for people who will be admitted to the Doctoral School in individual educational disciplines, the recruitment schedule, place of submission of documents and the date of the interview are published on the website of the Doctoral School: <https://szd.pwr.edu.pl/en/>.

4. The ranking list is determined separately for each educational discipline on the basis of the recruitment points obtained by individual candidates, awarded under the rules set out in § 22-26.

5. Candidates are qualified depending on their position on the ranking list, up to the number of places awarded for a given educational discipline, referred to in § 6 sec. 1, however, it is required to get the minimum recruitment score specified in § 22 sec. 6.

## **§ 13**

1. A person may be admitted to the Doctoral School except for the number of places referred to in § 6 sec. 1, if he or she has funding granted from other sources outside the University (including research projects, grants or other programs) financing of the doctoral scholarship in the amount of at least the amount referred to in art. 209 paragraph 4 of the Law on Higher Education and Science, and social security contributions paid by the University.

2. A person may be admitted to the Doctoral School beyond the established number of places referred to in § 6 section. 1, if education at the doctoral school is associated with the obligation of employment at the University referred to in Art. 209 section 1a of the Law on Higher Education and Science.

3. The financing referred to in sec. 1 and 2 should be provided for a period of at least 24 months. If the granted financing does not cover the costs of the doctoral scholarship or the costs of

remuneration for employment in the research project for a period of 48 months, it is necessary to obtain the consent of the Dean of the Doctoral School.

4. The condition for admission to the Doctoral School of the candidate referred to in sec. 1 is to meet the requirements related to the financing of the doctoral scholarship from other sources outside the University and to obtain the minimum recruitment point result specified in § 22 sec. 6.

5. The condition for admission to the Doctoral School is the candidate referred to in sec. 2 is to meet the requirements on which the financing of remuneration for employment at the University depends and to obtain the minimum recruitment score specified in § 22 sec. 6.

6. The candidates referred to in sec. 1 and 2 of the provisions of § 12 sec. 4 and 5 do not apply.

#### **§ 14**

The results of the recruitment procedure competition are public. After being handed over to the Rector, the competition results are announced on the website of the Doctoral School.

#### **§ 15**

Based on of the recruitment results, admission to the doctoral school is conducted by way of entry in the register of doctoral students.

#### **§ 16**

Refusal of admission to the Doctoral School takes place by an administrative decision of the Rector. The person who is refused admission to the Doctoral School based on the recruitment results, is served with the Rector's decision. There is no appeal against this decision.

#### **§ 17**

From the Rector's decision not to admit to the Doctoral School, a person dissatisfied with the decision is entitled to an application for reconsideration submitted to the Rector through the Dean of the Doctoral School, within 14 days from the date of delivery of the decision.

#### **§ 18**

Representatives of the Doctoral Students Self-Government may take part in the recruitment procedure as observers, on the terms specified by the Dean of the Doctoral School.

#### **§ 19**

1. A person admitted to the Doctoral School begins education and gains the rights of a doctoral student upon taking the oath and signing the oath.

2. A doctoral student at the Doctoral School of Wrocław University of Science and Technology cannot be a doctoral student at another doctoral school at the same time.

3. Training at the Doctoral School may begin from the first day of the winter semester or the first day of the summer semester of the academic year to which recruitment applies, in accordance with the academic calendar of Wrocław University of Science and Technology.

## § 20

The Rector provides compulsory training on safe and hygienic conditions of education, not less than 4 hours, for doctoral students starting their education at the Doctoral School, considering the specificity of education and the type of technical equipment used in the education process.

## § 21

The specimen of the candidate's card for the Doctoral School is determined by the Dean of the Doctoral School after obtaining the opinion of the Doctoral School Council.

## § 22

1. Candidates are assessed against five criteria:

- 1) Grades obtained in the course of higher education (detailed rules are specified in § 23).
- 2) Command of the English language (in accordance with Appendix 1 to the Admission Rules containing the scoring method depending on the obtained certificates and diplomas).
- 3) Description of the initial concept of the doctoral dissertation (detailed rules are specified in § 24).
- 4) Scientific activity or research and development activity (detailed rules are specified in § 25).
- 5) Interview (detailed rules are set out in § 26).

2. The recruitment score is determined according to the formula  $W = \sum_{i=1}^5 k_i p_i$ , where  $k_i$  is the weight of the  $i$ -th recruitment criterion and  $p_i$  is the number of points obtained in the  $i$ -th criterion.

3. The weights of the individual evaluation criteria  $k_i$  ( $i = 1, 2, 3, 4, 5$ ) are:

- 1)  $k_1 = 1$  (criterion: grades obtained in the course of higher education).
- 2)  $k_2 = 1$  (criterion: command of the English language).
- 3)  $k_3 = 1$  (criterion: description of the initial concept of the doctoral dissertation).
- 4)  $k_4 = 3$  (criterion: scientific activity or research and development activity).
- 5)  $k_5 = 4$  (criterion: interview).

4. Points  $p_i$  ( $i = 1, 2, 3, 4, 5$ ) for each of the evaluation criteria are awarded by the recruitment committee on a scale from 0 to 10.

5. The recruitment result is negative when the candidate gets  $p_i = 0$  points for one or more evaluation criteria.

6. The condition for admission to the Doctoral School is getting a recruitment point score of at least 50 points. out of 100 possible.

### § 23

1. Let  $S_1$  denote the CGPA obtained during the first cycle studies,  $S_2$  denote the CPGA got during the second cycle studies and  $S$  denote the CPGA obtained during the uniform studies (long-cycle master studies). The result of completed studies  $W$  is calculated as follows:

- 1) With completed two-cycle studies, the first and second cycle grades  $W = 0,5 \times (S_1 + S_2)$  are considered.
- 2) With completed uniform studies  $W = S$ .
- 3) With the not yet completed last semester of second-cycle studies, grades from all semesters of the second-cycle studies, excluding the last semester and are included in the  $S_2$  indicator, and  $W = 0,5 \times (S_1 + S_2)$ .
- 4) With unfinished uniform studies, grades from all semesters of studies, excluding the last semester are included in  $S$  and  $W = S$ .

2. The number of points  $p_1$  in the evaluation criterion grades obtained in the course of higher education, referred to in § 22 is assigned in accordance with the table below based on the  $W$  ratio calculated in accordance with sec. 1.

Result of completed studies $W$	Points $p_1$
at least 4,90	10
[4,80, 4,90)	9
[4,70, 4,80)	8
[4,60, 4,70)	7
[4,50, 4,60)	6
[4,40, 4,50)	5
[4,30, 4,40)	4
[4,10, 4,30)	3
[3,90, 4,10)	2
below 3,9	1

3. When calculating the number of points  $p_1$  with candidates who obtained a diploma abroad, the grading scale used at Wrocław University of Science and Technology is considered. Therefore, the grading scale used at the university that issued the foreign diploma is converted accordingly.

### § 24

1. The description of the initial concept of the doctoral dissertation should not be longer than 2 A4 pages and should contain:



- 1) Name and surname of the candidate.
  - 2) The discipline in which the doctoral dissertation will be prepared.
  - 3) Thematic scope of the doctoral dissertation, including the initial definition of the research problem, research hypothesis and expected results.
  - 4) Preliminary plan of research to be carried out.
  - 5) Justification for the selection of the thematic scope of the doctoral dissertation.
2. The description of the initial concept of the doctoral dissertation should be prepared in Polish or in English.
3. The description of the initial concept of the doctoral dissertation should be approved by the potential supervisor.
4. When assigning the number of points  $p_3$  in the criterion description of the initial concept of the doctoral dissertation referred to in § 22, the following procedure is used:
- 1) Each member of the recruitment committee assigns points on a scale from 0 to 10.
  - 2) The final result is the arithmetic mean of the points awarded, however, if more than 3 committee members participate in the evaluation, the lowest and highest score are not included in the calculation of the average.
  - 3) If a member of the recruitment committee is a potential supervisor or assistant supervisor indicated by the candidate, she or he does not participate in the assigning of points.

## § 25

1. The number of points  $p_4$  in the criterion of scientific activity or research and development activity referred to in § 22 is assigned according to separate rules for individual disciplines as described below.

### 10) Discipline: mathematics

The assessment covers:

- a) scientific articles on mathematics or its applications, accepted for publication or published during first and second cycle studies or uniform master's studies,
- b) citations,
- c) participation in conferences and seminars on mathematics or its applications,
- d) participation in grants and research projects in mathematics or its applications,
- e) scholarships or awards in mathematics or its applications, obtained through a competition,
- f) participation in the work of a research club on mathematics or its applications.

If at a given stage of the assessment in this category the sum of points reaches  $p_4 = 10$  points, this value is considered final. All presented and documented (confirmed) scientific achievements of the candidate are subject to evaluation based on the following scoring system:

Type of activity	Points
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publications (points for each article depending on the rank of the journal and the candidate's contribution)	2-6
citations	0-4
participation in conferences and scientific seminars (number of points depending on the importance of the event and the scope of participation)	0-4
participation in grants and research projects	0-4
scholarships or awards	0-4
participation in the work of a research club	0-3

## § 26

1. The interview is conducted in Polish and / or English.
2. In justified cases, it is possible to conduct an interview remotely using electronic means of communication selected by the recruitment committee.
3. Number of points  $p_5$  in the interview criterion, referred to in § 22 is assigned according to separate rules for individual disciplines.
4. For the interview are admitted only persons who have met all formal requirements, including the requirement to submit the documents referred to in § 11 sec. 1 by the date specified in the recruitment procedure schedule.
5. When assigning the number of points  $p_5$  in the criterion interview referred to in § 22, the following procedure is used:
  - 1) Each member of the recruitment committee assigns points on a scale from 0 to 10.
  - 2) The final result is the arithmetic mean of the points awarded, however, if more than 3 committee members participate in the evaluation, the lowest and highest score are not included in the calculation of the average.
  - 3) If a member of the recruitment committee is a potential supervisor or assistant supervisor indicated by the candidate, she or he does not participate in the assigning of points.

### **10) Discipline: mathematics**

The assessment covers:

- a) the candidate's level of knowledge – up to 8 points,
- b) way of presenting scientific interests – up to 4 points.

The total number of points cannot exceed 10.

Appendix 1

to the rules of recruitment to the Doctoral School of Wrocław University of Science and Technology (WUST) for the academic year 2024/2025

**Evaluation of the knowledge of English – list of certificates and diplomas**

Admission points Doctoral School WUST	Language courses / central examination grade – other universities	Language courses in the Department of Foreign Languages WUST	Cambridge English Qualifications	IELTS	ACERT	PTE Academic	TOEFL (iBT) TOEFL (CBT) TOEFL (PBT)	Language Cert	Common European Framework of Reference (CEFR)
10	C2	SJO C2.1	C2 Proficiency	8.0 – 9.0					C2
	C1	SJO C1.2	C1 Advanced 180 – 200	7.0 – 7.5	ACERT C1	65	from 94 from 240 from 587	C1 Pass	C1
	B2 grade 5.5	SJO B2.2 grade 5.5							
8	B2 grade 5.0	SJO B2.2 grade 5.0	B2 First 176 – 179	6.5	ACERT B2 grade 5.0	61	86-93 226-239 568-586	B2 134-150(W) 179-200 (W&S)	B2
6	B2 grade 4.5/4.0	SJO B2.2 grade 4.5/4.0	B2 First 173 – 175	6.0	ACERT B2 grade 4.5/4.0	56	79-85 213-225 550-567	B2 115-133(W) 153-178 (W&S)	B2
4	B2 grade 3.5	SJO B2.2 grade 3.5	B2 First 167 – 172	5.5	ACERT B2 grade 3.5	51	72-78 198-212 531-549	B2 97-114 (W) 129-152 (W&S)	B2
2	B2 grade 3.0	SJO B2.2 grade 3.0	B2 First 160 – 166		ACERT B2 grade 3.0	46	65-71 183-197	B2 75-96 (W)	B2

							513-530	100-128 (W&S)	
<b>10</b>	University diploma in philology or applied linguistics in a modern foreign language.								
<b>10</b>	University diploma, with a degree corresponding to the Polish Master's degree, obtained in countries where the language of instruction is an official language.								
<b>10</b>	A document issued abroad, confirming the obtaining of an academic degree or title as well as a degree or title in the field of art – the leading language of a higher education institution is recognised.								
<b>10</b>	A document confirming the completion of higher education or post-graduate studies abroad or in the Republic of Poland - the leading language is recognised provided that the language of instruction was exclusively foreign.								
<b>10</b>	A document confirming entry on the list of sworn translators in the Republic of Poland or a document confirming the qualifications of a sworn translator in another Member State of the European Union or in a Member State of the European Free Trade Association (EFTA), a party to the Agreement on the European Economic Area, or in the Swiss Confederation.								
<b>10</b>	A document certifying that the foreign language concerned is the mother tongue (first); the person concerned is a native speaker of that language.								