

# Academic career (principles of a doctoral school, basic legal acts, scientific fields and disciplines, academic career path, principles of promotion)

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## **Disciplines**

Training in our Doctoral School prepares to obtain the PhD degree and is carried out in the following disciplines:

- Architecture and urban planning,
- Automation, electronic, and electrical engineering,
- Information and communication technology,
- Biomedical engineering,
- Chemical engineering,
- Civil engineering and transport,
- Mechanical engineering,
- Environmental engineering, mining, and Energy,
- Mathematics,
- Chemical sciences,
- Physical sciences,
- Management and quality studies.



## **Doctoral School Administration**

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## **Basic information**

- Doctoral school website: <a href="https://szd.pwr.edu.pl/">https://szd.pwr.edu.pl/</a>,
- New law ACT of 20 July 2018 The Law on Higher Education and Science (nowa ustawa "Prawo o szkolnictwie wyższym i nauce") (<a href="http://konstytucjadlanauki.gov.pl/">http://konstytucjadlanauki.gov.pl/</a>),
- Other law regulations <a href="https://www.gov.pl/web/edukacja-i-nauka/">https://www.gov.pl/web/edukacja-i-nauka/</a>,
- Doctoral education: <a href="https://konstytucjadlanauki.gov.pl/ksztalcenie-doktorantow-najczesciej-zadawane-pytania">https://konstytucjadlanauki.gov.pl/ksztalcenie-doktorantow-najczesciej-zadawane-pytania</a>,
- At the doctoral school, all doctoral students receive a doctoral scholarship (with social security), which increases after a positive mid-term evaluation (after 2 years),
- Scientific categories of disciplines after the evaluation in 2021: A +,
  A, B +, B, C. Categories B and C result in the loss of the university's
  doctoral qualifications,
- The publications of doctoral students from the Doctoral School are included in the evaluation of the discipline.



## Comparison of the 2017 evaluation with 2021

## Four evaluation criteria in 2017:

- 1. Scientific achievements (publications and patents).
- 2. Scientific potential.
- 3. Practical effects of scientific and artistic activities.
- 4. Other effects of scientific and artistic activities.

### Three evaluation criteria in 2021:

- 1. Scientific publications and patents.
- 2. Financial effects (grants, commercialization).
- 3. Social and economic impact.
- In 2021, the scientific potential was not a separate criterion!



## **Evaluation results for 2017-2021 at WUST**

architecture and urban planning	B+
automation, electronics, and electrical engineering	B+
technical informatics and telecommunications	B+
biomedical engineering	Α
chemical engineering	Α
civil engineering and transport	B+
mechanical engineering	Α
material engineering	Α
environmental engineering, mining, and power engineering	B+
mathematics	A+
chemical sciences	Α
physical sciences	A+
management and quality sciences	Α



## Scientific activity

Scientific activity includes research, development work and artistic creation,

## Research is an activity which includes:

- basic research understood as empirical or theoretical works aimed primarily at gaining new knowledge about the foundations of phenomena and observable facts without any direct commercial application,
- application research understood as work aimed at acquiring new knowledge and skills, aimed at developing new products, processes or services or introducing significant improvements to them.



## Individual study plan for each semester

## The individual study plan for each semester includes:

- an individual schedule of classes to be carried out in a given semester,
- list of teaching internships,
- a brief description of the planned research,
- other forms of planned scientific activity (e.g. preparation of publications, participation in a scientific conference, foreign internship, etc.).

## **Teaching internships:**

- up to 60 hours per year,
- teaching internships are conducted in the Faculty where the doctoral student's supervisor works,
- teaching internships may be conducted in the form of conducting classes or participating in their conducting.



## PhD scholarship

Each doctoral student without a doctoral degree receives a doctoral scholarship,

The total period of receiving a doctoral scholarship at doctoral schools may not exceed 4 years,

## The monthly doctoral scholarship is at least:

- 37% of the professor's remuneration up to the month in which the mid-term evaluation was carried out (PLN 2,371.70 gross; about PLN 2,104.65 net),
- 57% of the professor's salary after the month in which the midterm evaluation was carried out (PLN 3,653.70 gross; approximately PLN 3,242.29 net)
- The amount of the doctoral scholarship may also depend on the doctoral student's achievements (there are additional sholarships).



## PhD scholarship

A doctoral student who submits his doctoral dissertation earlier than the date of completion of education provided for in the curriculum, receives a doctoral scholarship by the date on which the deadline for completing education expires, but not longer than for 6 months.

A doctoral student may not be employed as research assistant.

## The prohibition does not apply to employing a doctoral student:

- in order to carry out a research project,
- after a positive mid-term evaluation, however, in the case of employment exceeding half of the full-time employment, the amount of the scholarship is 40% of the amount of the monthly scholarship.



## Schedule of doctoral school **Participation in courses** Conducting research in the department of the supervisor, Year writing the doctoral dissertation (month) (0)(3 month) I (12 month) III (36 month) II (24 month) IV (48 month) dissertation, completion of Submission of the doctoral education at the doctoral Starting of the education Individual Research Plan Mid-term evaluation in doctoral school Appointment of supervisor school



## Starting of the education in doctoral school

- The education of doctoral students prepares for obtaining the doctoral degree and takes place at the doctoral school,
- A doctoral school is an organized form of education in at least 2 disciplines,
- A doctoral school may be run by an academic university (...) with the research category A +, A or B + in at least 2 disciplines,
- No fees are charged for educating doctoral students,
- Recruitment to the doctoral school takes place by way of a competition on the terms specified by the senate,
- You may only be a doctoral student in one doctoral school.



## Appointment of a supervisor (3 month)

- Within 3 months from the date of commencement of education, the doctoral student shall be appointed a supervisor or supervisors,
- Scientific supervision over the preparation of a doctoral dissertation is provided by the <u>supervisor or supervisors</u> or by the <u>supervisor and</u> <u>the auxiliary supervisor</u>,
- The supervisor and reviewer may be a person with the degree of habilitation (e.g. dr hab. or dr hab. inż.) or the title of profesor (e.g. prof. dr hab. or prof. dr hab. inż.), and the auxiliary supervisor a person with a doctoral degree (e.g. dr or dr inż.),
- The supervisor and reviewer may be a person who does not meet the above conditions, who is an employee of a foreign university or scientific institution, if the authority (...) considers that this person has significant achievements in the field of scientific issues covered by the doctoral dissertation.



## The individual research plan (12 month)

The individual research plan (IRP) is developed by the doctoral student in consultation with the supervisor (or supervisors). In the case of the appointment of an assistant supervisor, IRP is presented after the opinion of this supervisor.

## **IRP must include:**

- a schedule for the preparation of the doctoral dissertation detailing the stages and locations of the research to be conducted,
- including the dates for completing the sub-studies and developing their results, and optionally, depending on the type of research to be conducted.
- a deadline for submission of the dissertation, which must not exceed the date of completion of the eighth semester of education.



## The individual research plan (12 month)

IRP should be submitted within 12 months from the date of commencement of education (i.e. by 30.09.2022 for doctoral students who started their education on 01.10.2021). The implementation of IPB is subject to mid-term evaluation in the middle of the education period.

The deadline for submitting the doctoral dissertation specified in IRP may be extended, but not longer than by 2 years, on the terms specified in the regulations of the doctoral school. A doctoral student is deleted from the list of doctoral students in the event of failure to submit a doctoral dissertation by the deadline specified in IRP.



## Mid-term evaluation (24 month)

- Mid-term evaluation of an individual research plan is carried out by three-person committees recommended by the relevant scientific discipline councilsm
- Each committee consists of one person employed outside the Wrocław University of Science and Technology and two employees of the Wrocław University of Science and Technology,
- All members of the committee represent the discipline in which the doctoral dissertation is prepared.
- The supervisor and the asisstant supervisor may not be members of the committee.
- One committee performs the mid-term evaluation of no more than 7 doctoral students.
- Committee meetings may be conducted online.



## Mid-term evaluation (24 month)

The committee performs a mid-term evaluation of the implementation of the doctoral student's individual research plan on the basis of:

- individual research plan (IRP) of the doctoral student;
- written mid-term report, in which the doctoral student presents a report on the implementation of an individual research plan;
- a 15-minute oral presentation by the doctoral student of scientific achievements related to the implementation of the doctoral dissertation;
- discussions with the doctoral student about his research, described in the above documents and achievements, as well as about research plans specified in IRP.



## Mid-term evaluation (24 month)

## The mid-term evaluation ends with a positive or negative result. In the case of:

- a postive result, the doctoral continues eduction at the Doctoral School and his/her scholarship is increased by about 50%,
- a negative result, the doctoral student is removed from the Doctoral School.

## The result of the evaluation, together with the justification, are public.

Pursuant to the Regulations of the Doctoral School, in the event of a negative evaluation, a doctoral student may, within 7 days, apply to the Dean of the Doctoral School for a re-evaluation.



## Submission of the doctoral dissertation, completion of education at the doctoral school (48 month)

- The doctoral student's education ends with the submission of a doctoral dissertation,
- An individual research plan specifies the deadline for submitting a doctoral dissertation. This period may be extended, but not longer than by 2 years, on the terms set out in the regulations of the doctoral school,
- Period corresponding to the duration of maternity leave, leave on the terms of maternity leave, paternity leave and parental leave.



## Removal from the list of doctoral students

A doctoral student shall be deleted from the list of doctoral students in the case of:

- negative result of the mid-term evaluation,
- failure to submit the doctoral dissertation within the time limit specified in the individual research plan,
- resignation from education.

A doctoral student may be removed from the list of doctoral students in the case of:

- unsatisfactory progress in the preparation of the doctoral dissertation,
- failure to comply with the obligations referred to in art. 207 (provisions of the doctoral school regulations),

Removal from the list of doctoral students takes place by way of an administrative decision. The decision may be requested to reconsider the case.



## PhD student rights

- A doctoral student is entitled to holiday breaks not exceeding 8 weeks a year,
- The entity running the doctoral school issues a doctoral student ID card,
- A doctoral student who obtained a doctoral degree as a result of graduating from a doctoral school, the period of education at this school, not longer than 4 years, shall be included in the period of work on which employee rights depend,

A doctoral student who has not completed education at a doctoral school due to taking up employment as an academic teacher or research assistant or ceasing to train doctoral students in a given discipline, a period of education in this school, not longer than 4 years, shall be credited with until the period of work.



## The doctoral degree is awarded to a person who:

- holds the professional title of master, master of engineering obtained the learning outcomes for the qualifications at PQF level 8, while the learning outcomes in the field of modern foreign language skills are confirmed by a certificate (...) at the language proficiency level of at least B2,
- has a record of at least:
  - 1 scientific article published in a scientific journal or in peerreviewed materials from an international conference (MEiN list),
  - or1 scientific monograph published by the publishing house
     (MEiN list) presented and defended her doctoral dissertation.



- The doctoral dissertation presents the candidate's general theoretical knowledge in a discipline or disciplines and the ability to independently conduct scientific work,
- The subject of the doctoral dissertation is an original solution to a scientific problem, an original solution in the field of applying the results of own scientific research in the economic or social sphere,
- A doctoral dissertation may be a written work, including a scientific monograph, a collection of published and thematically related scientific articles, design, construction, technological and implementation work,
- The doctoral dissertation is accompanied by an abstract in English, and to the doctoral dissertation in a foreign language also an abstract in Polish.



- The procedure for awarding the doctoral degree is initiated at the request of a person meeting the requirements.
- A doctoral dissertation is attached to the application along with a positive opinion of the supervisor or supervisors,
- In the procedure for awarding the doctoral degree, 3 reviewers are appointed from among persons who are not employees of the doctoral entity and the university, whose employee is the person applying for the doctoral degree,
- Reviewers prepare reviews of the doctoral dissertation within 2 months of its delivery (Article 190 (3)),
- A person who has received positive reviews from at least 2 reviewers and has met requirements may be admitted to defend a doctoral dissertation.



## An employee who is not an academic teacher or research assistant is entitled, upon his / her request:

 leave to prepare a doctoral dissertation or to prepare for the defense of a doctoral dissertation, granted within a period agreed with the employer, for 28 days, which, according to separate regulations, are working days for this employee,

### and

 release from work to defend a doctoral dissertationFor the period of leave and sick leave, the employee is entitled to remuneration determined as for annual leave.



## Career path after doctorate

## Your post-doctorate career path may include:

- Research and teaching at the university as an academic teacher,
- Research work at a university or research institutes,
- R & D-Research and Development,
- Expert activity, including preparation of opinions and expert opinions.

## Research and development works are carried out:

- At universities,
- In specialized research and development units,
- In research and development centers in large companies, e.g. Nokia, Google, Microsoft, Apple, Siemens,
- In small and medium-sized companies,
- In startups.



## **Academic work**

## Academic teachers are employed in groups of employees:

- teaching (educating and educating students or participating in the education of doctoral students),
- research (conducting scientific activity or participating in the education of doctoral students),
- research and teaching.

## An academic teacher is employed in the position:

- professor (after obtaining the title of professor),
- university professor (after obtaining the degree of habilitation),
- assistant professor (after obtaining the doctoral degree),
- assistant (before obtaining the doctoral degree).



## **Habilitation degree**

## The habilitation degree is awarded to a person who:

- has achieved scientific achievements that constitute a significant contribution to the development of a specific discipline (monograph or a series of thematically related articles published on the MEiN list),
- demonstrates significant scientific activity carried out in more than one university, scientific institution, in particular foreign.

In Western countries, usually one degree is a doctoral degree. In some countries there is also habilitation (e. g. Germany, France, Portugal).



## Title of professor

## The title of professor is awarded to a person who:

- holds the academic degree of habilitation and:
  - outstanding domestic or foreign scientific achievements,
  - participated in the work of research teams implementing projects financed by domestic or foreign competitions, or completed research internships in scientific institutions, including foreign ones, or conducted research or development work at universities or scientific institutions, including foreign ones (...)

In exceptional cases (...), the title of professor may be awarded to a person holding a doctoral degree. Achievement, (...), may be a realized original design, construction, technological or artistic achievement.



## Tasks to be performed for the next class

- Familiarize yourself with the Act 2.0 on doctoral schools: <a href="https://konstytucjadlanauki.gov.pl/pobierz-ustawe">https://konstytucjadlanauki.gov.pl/pobierz-ustawe</a>
- Read the frequently asked questions about Act 2.0: <a href="https://konstytucjadlanauki.gov.pl/ksztalcenie-doktorantow-najczesciej-zadawane-pytania">https://konstytucjadlanauki.gov.pl/ksztalcenie-doktorantow-najczesciej-zadawane-pytania</a>
- Familiarize yourself with the legal acts of Wroclaw University of Science and Technology regarding doctoral students: <a href="https://szd.pwr.edu.pl/o-szkole/akty-prawne">https://szd.pwr.edu.pl/o-szkole/akty-prawne</a>

