

Training Program

of the Krakow School of Interdisciplinary PhD Studies

I. GENERAL PROVISIONS

§ 1

Education at the Krakow School of Interdisciplinary PhD Studies, hereinafter referred to as the “PhD School”, is provided jointly by: the Henryk Niewodniczański Institute of Nuclear Physics Polish Academy of Sciences (IFJ PAN) as the Coordinating Unit (hereinafter referred to as “Coordinating Unit”), Jerzy Haber Institute of Catalysis and Surface Chemistry Polish Academy of Sciences (IKiFP PAN), Jerzy Maj Institute of Pharmacology Polish Academy of Sciences (IF PAN), Aleksander Krupkowski Institute of Metallurgy and Materials Science Polish Academy of Sciences (IMiM PAN), Strata Mechanics Research Institute Polish Academy of Sciences (IMG PAN), Mineral and Energy Economic Research Institute Polish Academy of Sciences (IGSMiE PAN) and AGH University of Science and Technology in Krakow (AGH).

§ 2

Education at the PhD School prepares students to obtain a PhD degree.

§ 3

The PhD School provides education in:

- 1) the field of natural sciences and the disciplines of: physical sciences, chemical sciences,
- 2) the field of medical and health sciences and the disciplines of medical sciences and pharmacology and pharmacy,
- 3) the field of engineering and technology and the disciplines of materials engineering, environmental engineering, mining and energy.

§ 4

The PhD School shall offer the PhD Students conditions for:

- 1) pursuing independent research, including research conducted outside the Units constituting the PhD School, by implementing an individual research proposal and an individual training program,

- 2) preparing a doctoral dissertation within one of the disciplines in which the PhD School offers education under the mentorship of a supervisor or supervisors, or a supervisor and an auxiliary supervisor,
- 3) participating in an existing or initiating a new scientific collaboration with research teams working in other research units, both in Poland and abroad,
- 4) contributing to the national and international scientific community by systematic presentation of research results in the scientific environment, preparation of research papers for publication and active participation in scientific conferences,
- 5) attaining competencies to conduct selected classes,
- 6) preparing for the conferment of the degree of doctor under the mentorship of a supervisor or supervisors, or a supervisor and an auxiliary supervisor.

II. TERM AND RESULTS OF EDUCATION

§ 5

Education at the PhD School lasts from 6 to 8 semesters and enables PhD students to achieve learning outcomes corresponding to the qualifications at level 8 of the Polish Qualifications Framework for a discipline within which a doctoral dissertation is under preparation.

§ 6

As a result of education at the PhD School, a PhD student shall achieve the following learning outcomes in the category of knowledge (codes in accordance with the Regulation of the Ministry of Science and Higher Education of November 14, 2018 on the second degree characterization of the learning outcomes for the qualifications at level 6-8 of the Polish Qualifications Framework (Journal of Laws 2018, item 2218)):

1) A PhD student knows and understands:

- a) EU1(P8S_WG) to an extent that allows effective revision of existing paradigms, the global body of work including theoretical foundations as well as general issues and selected specific problems (specific to a scientific discipline or disciplines within which a PhD student prepares a doctoral dissertation);
- b) EU2 (P8S_WG) main development trends in the scientific disciplines in which education is provided;

- c) EU3 (P8S_WG) methodology of scientific research;
- d) EU4 (P8S_WG) rules for disseminating the results of scientific activity, including the open access mode;
- e) EU5 (P8S_WK) fundamental problems of contemporary civilization,
- f) EU6 (P8S_WK) economic, legal, ethical and other relevant factors affecting scientific activity;
- g) EU7 (P8S_WK) basic principles related to the transfer of knowledge to business and social spheres as well as the commercialization of the output of scientific activity and the know-how related to this output.

§ 7

As a result of education at the PhD School, a student shall achieve the following learning outcomes in the category of skills (codes in accordance with the Regulation of the Ministry of Science and Higher Education of November 14, 2018 on the second degree characterization of the learning outcomes for the qualifications at level 6-8 of the Polish Qualifications Framework (Journal of Laws of 2018, item 2218)):

1) A PhD student can:

- a) EU8 (P8S_UW) use knowledge from various areas of science for creative identification, formulation and innovative handling of complex research problems, in particular: define the purpose and subject of scientific research, formulate research assumptions, develop research methods, techniques and tools and creatively use these; draw conclusions based on the output of scientific research; perform critical analysis and evaluation of research output, expert activity and other work of creative nature and its contribution into the development of knowledge; transfer the output of scientific activity to business and social spheres;
- b) EU9 (P8S_UK) communicate on specialist topics to an extent that will enable active contribution to the international scientific community;
- c) EU10 (P8S_UK) disseminate the output of scientific activity, including popular forms addressed to broad audience;
- d) EU11 (P8S_UK) initiate debates and take active part in the scientific discourse;
- e) EU 12 (P8S_UK) use a foreign language at B2 level of the Common European Framework of Reference for Languages to an extent that allows active contribution into an international research and professional community;

f) EU 13 (P8S_UO) plan and implement – both individually and as part of a team – research and creative projects, also in an international environment;

g) EU 14 (P8S_UU) independently plan and act towards personal development as well as inspire and organize the development of other people; plan classes or courses and conduct them using modern methods and tools.

§ 8

As a result of education at the PhD School, a student shall achieve the following learning outcomes in the category of social competencies (codes in accordance with the Regulation of the Ministry of Science and Higher Education of November 14, 2018 on the second degree characterization of the learning outcomes for the qualifications at level 6-8 of the Polish Qualifications Framework (Journal of Laws of 2018, item 2218)):

1) A PhD student is prepared to:

a) EU15 (P8S_KK) critically review the body of work within a given scientific discipline, critically review his/her own contribution into the development of the discipline, recognize the importance of knowledge in addressing problems of cognitive and practical nature;

b) EU16 (P8S_KO) fulfill social obligations imposed on a researcher, initiate actions for the benefit of the public, think and act in an entrepreneurial manner;

c) EU17 (P8S_KR) preserve and foster the values represented by communities of researchers and creators, including independent pursuit of research and respect for the principle of public ownership of research output while demonstrating compliance with the principles of intellectual property protection.

§ 9

1. A detailed list of all achieved learning outcomes during education at the PhD School is presented in Attachment A.

2. A PhD student is obliged to document the achievement of all learning outcomes and satisfy other requirements provided for in the training program of the PhD School prior to the submission of a doctoral dissertation.

III. FORMS OF EDUCATION

§ 10

The PhD School develops general skills, including those falling outside of the scope of the doctorate discipline, as well as specialist and soft skills.

§ 11

As a result of education at the PhD School, the students shall demonstrate an interdisciplinary approach to solving problems posed by contemporary science.

§ 12

1. Education at the PhD School shall be provided in the form of:

- 1) individual training,
- 2) student's participation in conferences and scientific internships,
- 3) vocational training,
- 4) preparation of scientific papers and a doctoral dissertation by a student.

2. Individual training is composed of:

- 1) training based on an individual research proposal developed jointly by a PhD student and his/her supervisor(s), specifying the subject matter, scope and schedule of research work leading to on-time completion of education and preparation of a doctoral dissertation,
- 2) training pursued as an individual training program based on common PhD classes provided by the PhD School and conducted in the Polish or English language, encompassing general and specialist lectures, seminars, and auditorium and laboratory classes as well as training in the scope of soft and teaching skills.

IV. INDIVIDUAL RESEARCH PROPOSAL

§ 13

1. Within 12 months from starting doctoral education, a PhD School student is obliged to prepare an individual research proposal referred to in Article 202 of the Act of July 20, 2018 – Law on higher education and science (Journal of Laws of 2022, item 574, as amended).

2. A PhD student shall prepare the individual research proposal referred to in Para. 1 jointly with his/her supervisor or supervisors.

3. If the scientific mentorship over the preparation of a doctoral dissertation is provided also by an auxiliary supervisor, the individual research proposal referred to in Para. 1 should be evaluated also by this supervisor.

4. A PhD student presents the individual research proposal referred to in Para. 1 to the PhD School Director through the competent PhD School Deputy Director for its verification.

§ 14

The implementation of an individual research proposal should ensure that the doctoral education is completed on time and that the learning outcomes referred to in § 6-8 are achieved.

§ 15

1. Starting from the second year of education, an individual research proposal may be updated before the commencement of every semester.

2. The update of an individual research proposal cannot be made during the semester immediately preceding the Mid-Term Evaluation.

3. An updated individual research proposal should be submitted together with the justification for changes approved by a supervisor, supervisors, or a supervisor and an auxiliary supervisor.

§ 16

1. At the end of each year of education, a PhD School student is obliged to submit an annual report to the competent PhD School Deputy Director.

2. The report referred to in Para. 1 presents the degree of implementation of an individual research proposal, including the preparation of a doctoral dissertation and the degree of implementation of an individual training program and shall require the approval of a supervisor or supervisors.

3. The report referred to in Para. 1 shall be reviewed by a committee composed of:

a. the PhD School Director,

b. the competent PhD School Deputy Director in a given Unit,

c. senior research worker of the competent Unit appointed by its Director or Rector, or a person authorized by them.

4. A template of the report referred to in Para. 1 shall be specified by the PhD School Director by way of a decree.

V. INDIVIDUAL TRAINING PROGRAM

§ 17

1. During education at the PhD School, a PhD student is obliged to complete courses included in the relevant training modules, including:

- 1) courses included in the general module,
- 2) courses included in the interdisciplinary module,
- 3) courses included in the specialist module,
- 4) workshops and trainings included in the soft skills module,
- 5) doctoral seminar,
- 6) vocational training.

2. The general module encompasses courses preparing a student to master a set of skills necessary to conduct research and academic teacher work. The module is obligatory for all PhD students.

3. The interdisciplinary module encompasses general issues of the disciplines within which education is provided at the PhD school. The module is obligatory for the PhD students in the scope of courses falling outside of the major discipline.

4. The specialist module encompasses specific problems of the disciplines within which education is provided at the PhD School. The module is obligatory for the PhD students preparing a doctoral dissertation within a given discipline.

5. The soft skills module is conducted in the form of workshops and trainings. The module includes in particular: courses in the scope of skills necessary for preparation of scientific publications and conference lectures, knowledge of sources and rules of funding science, including the system of grants and principles governing the preparation of grant applications, knowledge of intellectual property protection rights and open access policy.

6. The doctoral seminar shall be delivered separately for each year of study.

7. A PhD student is obliged to complete the successive modules in the amount of:

- 1) general module – 40 hours to be chosen from the didactic offer of the PhD School,
- 2) interdisciplinary module – 20 hours to be chosen from the didactic offer of the PhD School,

- 3) specialist module – 60 hours to be chosen from the didactic offer of the PhD School,
- 4) soft skills module – 30 hours,
- 5) doctoral seminar – 80 hours,
- 6) vocational training – 30 hours.

8. A PhD student should complete the courses within the modules referred to in § 17, Para. 1, Points 1-3 by the end of the 4th semester of education at the PhD School. The postponement of this deadline is possible at the request of a supervisor submitted to the PhD School Director.

§ 18

1. The didactic offer of the PhD School is announced every year.
2. Through its wide didactic offer brought by the Units, the PhD School provides the PhD students with conditions allowing the extension of the obligatory training program announced for a given academic year by elective courses.
3. The elective courses to be offered may include e.g.: lectures organized by the PhD School and conducted by foreign lecturers or, with the consent of a supervisor, classes held in other scientific units.
4. In justified cases and with the consent of the PhD School Director, the courses conducted outside of the PhD School may be included in a relevant training module.

§ 19

1. During education at the PhD School, a PhD student is obliged to complete the vocational training referred to in § 17, Para. 1, Point 6.
2. The vocational training referred to in Para. 1 should be completed within the limit of at least 30 hours for the whole duration of doctoral education.
3. The vocational training referred to in Para. 1 can take the form of:
 - a. conducting classes,
 - b. supervising apprentices, interns, bachelor's and master's students,
 - c. participation in science outreach events organized in the Units,
 - d. internships in accredited laboratories,

e. internships and study tours,

f. professional work in the case of students pursuing the program “Doktorat wdrożeniowy” (“Implementation Doctorate Program”).

4. The settlement of vocational training hours shall be carried out by the competent PhD School Deputy Director.

§ 20

During education at the PhD School, a PhD student is obliged to take active part in seminars organized by the Unit and research groups he/she is affiliated with.

VI. MENTORSHIP OVER THE IMPLEMENTATION OF THE TRAINING PROGRAM

§ 21

1. The review of a PhD student’s progress shall be carried out on an annual basis.

2. To complete a given year of doctoral education, a student is obliged to:

a) get a pass in the obligatory and elective courses and complete the vocational training referred to in § 17, and any other research activity undertaken by a PhD student in a given academic year,

b) submit the annual report referred to in § 16 including detailed information on the progress in the implementation of an individual research proposal and advancement in research work constituting the subject matter of a doctoral dissertation within the deadline and place indicated by the PhD School Director.

3. A pass is documented in a PhD student’s record book.

4. If the progress and advancement in works demonstrated in an annual report differs from the schedule of the implementation of an individual research proposal, a PhD student is obliged to submit a written justification for the differences, approved by his/her supervisor or supervisors, and prepare an appropriate correction of the individual research proposal.

5. An annual report and its potential discrepancies in relation to an individual research proposal as well as fulfillment of the requirements specified in Para. 2, Letter a shall be reviewed by the committee referred to in § 16, Para. 3.

§ 22

In the event of non-acceptance of the annual report by the committee referred to in § 16, Para. 3 because of unsatisfactory progress in the preparation of a doctoral dissertation, the PhD School Director shall request the Director of a Unit being an institute of the Polish Academy of Sciences or the University Rector to remove the student from the list of PhD School students pursuant to Art. 203 (2) (1) of the Act.

VII. MID-TERM EVALUATION

§ 23

1. The PhD School students undergo a mid-term evaluation in the mid-term of education period.
2. The rules and manner of conducting a mid-term evaluation shall be specified in the “Organizational Regulations on Education at the Krakow School of Interdisciplinary PhD Studies”.

§ 24

1. A negative result of a mid-term evaluation shall result in a removal from the list of the PhD School students.

VIII. FINAL PROVISIONS

§ 25

1. The provisions of this Training Program shall come into force on the day of its publication by the Coordinating Unit and after its adoption by the competent Scientific Councils of the Units being institutes of the Polish Academy of Sciences and the AGH Senate.
2. On the day of coming into force of this Training Program, the Training Program of the Krakow School of Interdisciplinary PhD Studies adopted by the Scientific Councils of the Units being institutes of the Polish Academy of Sciences and the AGH Senate and in force since the academic year 2019/2020 shall expire.
3. The determination of the Training Program must be consulted with the PhD Student Government. In the event of the ineffective expiration of the term specified in the Unit’s or University’s Statute, the requirement of the consultation shall be deemed to be fulfilled.

Disclaimer: Any legal texts published here are of informative character only and should not be construed as the source of law.

Attachment A

The list of achieved learning outcomes during education at the PhD School is presented in Table no. 1

Name of the education module, activity	Minimum of achieved learning outcomes
General module	EU1, EU2, EU8, EU15
Interdisciplinary module	EU1, EU2, EU8, EU15
Specialist module	EU1, EU2, EU3,EU8, EU13
Soft skills module	EU4, EU5, EU6, EU7, EU10, EU14, EU16, EU17
Doctoral seminar	EU4, EU5, EU8, EU9, EU10, EU11, EU15
Elective module	EU1, EU2, EU8, EU12, EU15
Independent research work under the mentorship of a supervisor(s)	EU1, EU2, EU3, EU8, EU9, EU10, EU11, EU13, EU14, EU15, EU16, EU17
Participation in conferences and scientific internships	EU2, EU3, EU4, EU7, EU8, EU9, EU10, EU11, EU12, EU17
Vocational training	EU6, EU7, EU8, EU10, EU13, EU14, EU16
Preparation of scientific papers and a doctoral dissertation	EU1, EU2, EU3, EU4, EU5, EU6, EU8, EU9, EU10, EU11, EU12, EU15, EU17