

**PROGRAMME OF STUDIES FOR THE DOCTORAL SCHOOL
AT THE PEDAGOGICAL UNIVERSITY OF KRAKOW
VALID FOR THE ACADEMIC YEAR 2020/2021**

SECTION I

The assumptions and characteristics of the teaching programme

1. The education at Doctoral School (DS):

- 1) lasts 8 semesters;
- 2) consists of the Study Curriculum (SC), Individual Research Plan (IRP);
- 3) may comprise additional ways of acquiring and developing qualifications, at DS student's own initiative
- 4) prepares DS student for research, development, artistic and teaching work, within the scope of:
 - a. academic competences;
 - b. specialist competences;
 - c. social competences.

2. Academic competences comprise:

- 1) skills connected with the methodology of running research or artistic activity;
- 2) ability to make use of international scientific or artistic heritage;
- 3) ability to identify and solve research or artistic problems;
- 4) ability to independently plan and carry out scientific research or artistic activities;
- 5) skills connected with attracting external resources for research or artistic activities;
- 6) ability to prepare academic publication or present an artistic work, conference paper, patent or implementation, as well as activities popularising science or arts;
- 7) ability to cooperate in international and local research teams and networks, or in team artistic projects and artistic cooperation networks;
- 8) ability to run classes at a tertiary level, including the use of new technologies.

3. Specialist competencies are mostly developed through the subjects assigned to a given discipline (especially: Methodology of the discipline, specialist Workshops, Guest lectures) and they comprise in particular:

- 1) knowledge of advanced theoretical notions specific for a given area or discipline, as well as for interdisciplinary and inter-area research;
- 2) specialist methodological competences within the scope of performer research or artistic activities;
- 3) advanced, detailed knowledge related to the area of research or artistic activities, and encompassing the latest achievements of science or arts.

4. Social competences are developed not only through the content of selected subjects, but also through the workshop formula of classes, group projects, public reporting sessions, summer schools, teaching practice, participation in conferences and team grant projects, internships in Poland and abroad. These competencies comprise in particular:

- 1) social competencies related to research or artistic activities and the role of an academic/scientist or artist, including their social and ethical responsibility;
 - 2) planning one's academic or artistic development and professional career;
 - 3) teamwork skills;
 - 4) business and management skills;
 - 5) skills in communication and exchange of experience and scientific or artistic ideas.
5. The School supports:
- 1) interdisciplinary activities and projects;
 - 2) PhD students' mobility and making contacts in Poland and abroad through enabling PhD students' participation in exchange programmes and conferences, also international;
 - 3) carrying out research and artistic activities, also outside the particular University or research unit;
 - 4) academic or artistic cooperation within the frames of research teams, also international;
 - 5) participation in summer schools and other programmes or courses (also on-line) that develop academic, artistic, didactic, and social skills.
6. The Programme of Studies at Doctoral School is of an interdisciplinary character. It is realised through a varied range of subjects, workshops, and other forms available for all DS students, it also offers an opportunity to gain interdisciplinary qualifications through participation in classes offered by other doctoral schools, research and cultural institutions in Poland and abroad.

SECTION II

Assumed educational outcomes and the ways of verification

1. The Programme of Studies at Doctoral School leads to educational outcomes for qualifications at grade 8 of Polish Qualifications Framework.
2. Educational outcomes achieved by a PhD student are verified on the basis of:
 - 1) credits and marks received during the implementation of the Study Curriculum;
 - 2) realisation of IRP, including the result of the diploma exam;
 - 3) 3) mid-term evaluation in the middle of the programme, which can be either positive or negative;
 - 4) independent activities performed on an DS student's own initiative, that lead to raising scientific, professional, an social skills.
3. The condition for successfully completing a semester by an DS student is obtaining a sum of ECTS points required for a given semester.
4. The condition for successfully completing the hole programme is:
 - 1) obtaining the sum of ECTS points required in the DS Study Curriculum;
 - 2) achieving a positive mark during the mid-term evaluation;
 - 3) realisation of Individual Research Plan, including a positive mark at the diploma exam;

4) fulfilling other duties resulting from the provisions of DS Regulations and Study Curriculum

5. Educational outcomes and forms of verification at Doctoral School are outlined in Table 1.

Table 1. Educational outcomes and forms of verification at Doctoral School

Symbol	Learning outcomes – the doctoral student:	Methods of verification	Symbol in Minister’s Regulation
KNOWLEDGE			
W1	knows and understands — to a degree enabling a revision of existing paradigms — the international heritage of a given area, comprising theoretical bases and general problems, as well as selected specific problems relevant for the discipline realised at Doctoral School.	Confirmation of the education outcomes within the frames of individual PhD seminar Confirmation of the education outcomes within the frames of IRP Confirmation of the education outcomes according to the regulations delineated in suggested courses, in particular within the frames of guest lectures. Confirmation of the education outcomes through individual work assigned by the teacher Passing exams, including the diploma examination	P8S_WG
W2	knows and understands the main trends relevant for the discipline realised at Doctoral School.	Confirmation of the education outcomes within the frames of individual PhD seminar Confirmation of the education outcomes within the frames of IRP Confirmation of the education outcomes according to the regulations delineated in suggested courses, in particular within the frames of guest lectures. Confirmation of the education outcomes through individual work assigned by the teacher	P8S_WG

		Passing exams, including the diploma examination	
W3	knows and understands research methodology in the particular discipline.	<p>Confirmation of the education outcomes within the frames of individual PhD seminar</p> <p>Confirmation of the education outcomes within the frames of IRP</p> <p>Confirmation of the education outcomes according to the regulations delineated in suggested courses, in particular on methodology</p> <p>Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g.</p> <p>Summer schools on methodology, symposia on methodology, methodology workshops, and other forms showed in DS Rules and Regulations</p> <p>Preparing a correct description of the methodological part in line with the requirements of NCN grants or their equivalents in arts</p>	P8S_WG
W4	knows and understands the principles of the disseminating the results of scientific and artistic activities, also in the form of open access	<p>Confirmation of the education outcomes on the basis delineated in proposed courses, also optional and on-line Confirmation of the education outcomes within the frames of IRP</p> <p>Preparing a formally correct application in order to obtain external resources for research, e.g. NCN grant application, or equivalent in arts</p> <p>preparing an academic article accepted for publication or submitting a work of art for an exhibition</p> <p>active participation in an academic conference/artistic event, preparing</p>	P8S_WG

		<p>a presentation, announcement, or poster, or a work of art</p> <p>Confirmation of the education outcomes through other forms organised outside DS, e.g. at Children and Parents' University, Third Age University, Scientists' Night, Festival of Sciences, and other social activities popularising the results of research or artistic activities indicated in IRP</p>	
W5	<p>knows and understands the fundamental dilemmas of contemporary civilisation</p>	<p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS (in particular Philosophy of Science, Ethics in Science, optional subjects)</p> <p>Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. Summer schools, symposia, or workshops,</p> <p>Confirmation of the education outcomes through individual work assigned by the supervisor</p> <p>Active participation in an academic conference/artistic event, preparing a presentation, announcement, or poster,</p> <p>Presentation of a work of art at an artistic event</p> <p>Participation in public debates</p>	P8S_WK
W6	<p>knows and understands economic, legal, ethical, and other conditions of academic or artistic activities</p>	<p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS</p> <p>Preparing a formally correct application in order to obtain external resources for research or artistic projects, e.g. NCN or NNAWA grant application, or their equivalent in arts</p>	P8S_WK

		Confirmation of other education outcomes defined in IRP	
W7	knows and understands the basic rules of the transfer of knowledge to the social and economic spheres, and of commercialisation of the results of research and artistic activities and related know-how	Confirmation of the education outcomes on the basis delineated in proposed courses at DS, including optional courses Confirmation of the education outcomes through internships	P8S_WG
SKILLS			
U1	is able to use knowledge connected with various areas of science and arts, formulate and find innovative solutions to complex problems or perform research or artistic tasks	Confirmation of the education outcomes through individual seminar Confirmation of the education outcomes on the basis of IRP Confirmation of the education outcomes on the basis delineated in proposed courses at DS Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. Summer schools, symposia, or workshops	P8S_UW
U2	is able to utilise methodological knowledge in research / artistic activities, in particular define the aim and subject of research, formulate research or artistic hypothesis, develop research or artistic methods, techniques, and tools and implement them in a creative way, make assumptions on the basis of research results or artistic activities	Confirmation of the education outcomes through individual seminar Confirmation of the education outcomes through individual work assigned by the supervisor including article, paper, presentation of a work of art Confirmation of the education outcomes on the basis delineated in proposed courses at DS Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. Summer schools on methodology, symposia on	PSS UW

		<p>methodology, methodology workshops, and other forms</p> <p>Preparing a correct description of the methodological part in line with the requirements of NCN grants or their equivalents in arts</p>	
U3	<p>using the acquired knowledge, is able to make a critical analysis and assessment of research results, expert activities and other creative works and their contribution to the the development of knowledge, culture, and arts</p>	<p>Confirmation of the education outcomes through individual seminar</p> <p>Confirmation of the education outcomes through individual work assigned by the supervisor e.g. review, polemic, evaluation</p> <p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS</p> <p>Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. preparing critical bibliography for IRP</p> <p>Preparing a review article, accepted for publication or with supervisor's positive opinion or submitting a work of art for an exhibition</p> <p>Active participation in an academic conference/artistic event, preparing a presentation, announcement, or poster, or a work of art</p>	P8S_UW
U4	<p>is able to analyse the possibility of transferring the results of research /artistic activities to economic and social spheres</p>	<p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS, also optional</p> <p>Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. by preparing a project implementing research results, preparing an application for external financing,</p>	P8S_UW

		outside MNiSW and other defined in IRP	
U5	is able to communicate specialist subjects at a level that enables active participation in international academic or artistic community	<p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS</p> <p>Preparing an academic article, accepted for publication or with supervisor's positive opinion, or submitting a work of art for an exhibition</p> <p>Active participation in an academic conference/artistic event, preparing a presentation, announcement, or poster, or a work of art</p> <p>Confirmation of the education outcomes through other forms organised outside DS, e.g. Scientists' Night, Festival of Sciences, and other social activities popularising the results of research or artistic activities indicated in IRP</p>	P8S_UK
U6	is able to disseminate the results of research or artistic activities, also in popular form	<p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS</p> <p>Preparing an academic or popular science article, or submitting a work of art for an exhibition</p> <p>Active participation in an academic conference/artistic event, preparing a presentation, announcement, or poster, or a work of art</p> <p>Confirmation of the education outcomes through other forms organised outside DS, e.g. Children and Parents' University, Third Age University Scientists' Night, Festival of Sciences, and other social activities popularising</p>	P8S_UW

		<p>the results of research or artistic activities indicated in IRP</p> <p>Participation in summer school</p>	
U7	is able to initiate debate and take part in academic and artistic discourse	<p>Active participation in a conference, public reporting session, panel discussion</p> <p>Preparing an academic or popular science article, or submitting a work of art for an exhibition</p> <p>Confirmation of the education outcomes delineated IRP</p> <p>Confirmation of the education outcomes on the basis delineated in DS courses, including optional</p>	P8S_UK
U8	knows a foreign language at a level enabling participation in an international academic, artistic, and professional environment	<p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS, including courses taught in English</p> <p>Preparing a formally correct application in order to obtain external resources for research, e.g. NCN grant application, or other</p>	P8S_UK
U9	is able to plan and implement individual and team research or artistic projects, also in an international environment	<p>Confirmation of the education outcomes through individual seminar</p> <p>Confirmation of the education outcomes through individual work assigned by the supervisor</p> <p>Confirmation of the education outcomes on the basis delineated in courses at DS, including optional ones</p> <p>Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. scientific summer schools, study visits, international cooperation, preparing an implementing project, preparing an application for external funding,</p>	P8S_UO

		outside MNiSW and other listed in the IRP	
U10	is able to work independently towards own development and inspire and organise other people's development	<p>Confirmation of the education outcomes on the basis delineated in courses at DS, including optional ones</p> <p>Participation in a public reporting session at DS ,</p> <p>Participation in events popularising science or arts</p> <p>Confirmation of the education outcomes through individual work assigned by the supervisor</p> <p>Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. scientific summer schools</p>	P8S_UU
U11	is able to plan classes or courses and teach with the use of modern methods and tools	<p>Confirmation of the education outcomes on the basis delineated in courses on methodology and research tools at DS</p> <p>Confirmation of the education outcomes on the basis delineated in courses at UP e-learning platform</p> <p>Confirmation of the education outcomes through teaching practice</p>	P8S_UU
SOCIAL COMPETENCES			
K1	is ready to critically assess the output of a particular discipline taught in the school and own contribution to its development	<p>Confirmation of the education outcomes on the basis delineated in proposed courses</p> <p>Confirmation of the education outcomes through individual work assigned by the teacher</p> <p>Passing the diploma examination</p> <p>Confirmation of the education outcomes defined in IRP</p>	P8S_KK

K2	is ready to accept the significance of science / arts in solving theoretical and practical problems	<p>Confirmation of the education outcomes on the basis delineated in proposed courses</p> <p>Confirmation of the education outcomes through individual work assigned by the teacher</p> <p>Passing the diploma examination</p> <p>Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. summer schools, symposia, workshops, and other defined in IRP</p> <p>preparing a correct description of a grant application</p>	P8S_KK
K3	is ready to fulfil scientists' and artists commitments to community, as well as to initiate activities for public interest	<p>confirmation of the education outcomes on the basis delineated in proposed courses at DS, in particular on ethics, and selected optional courses</p> <p>Confirmation of the education outcomes through individual work assigned by the supervisor</p> <p>Confirmation of the education outcomes through other forms organised outside DS, e.g. scientific summer schools, study visits, participation in international cooperation projects, Children and Parents' University, Third Age University Scientists' Night, Festival of Sciences, and other social activities popularising the results of research or artistic activities indicated in IRP</p> <p>Preparing an academic or popular science article, or submitting a work of art for an exhibition</p> <p>Active participation in an academic conference/artistic event, preparing a presentation,</p>	P8S_KR

		<p>announcement, or poster, or a work of art</p> <p>Participation in public debates</p>	
K4	<p>is ready to think and act in an entrepreneurial way</p>	<p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS</p> <p>Preparing a formally correct application in order to obtain external resources for research, e.g. an application for Preludium grant at NCN, or for other competitions</p> <p>Confirmation of the education outcomes through other forms organised outside DS, e.g. scientific summer schools, and other activities indicated in IRP</p> <p>Confirmation of the education outcomes through individual work assigned by the supervisor</p> <p>Obtaining language certificates and gaining other qualifications</p>	P8S_KR
K5	<p>is ready to maintain and develop the ethos of academic or artistic community, including carrying out research in an independent way, respecting the rule of public property of research results and artistic work including the regulations on the protection of intellectual or artistic property</p>	<p>Confirmation of the education outcomes through individual seminar</p> <p>Confirmation of the education outcomes on the basis delineated in proposed courses at DS, in particular on ethics, and selected optional courses</p> <p>Confirmation of the education outcomes on the basis delineated in other forms organised outside DS, e.g. scientific symposia, artistic events, or other indicated in IRP</p>	PSS KR

SECTION III
Study Curriculum at the Doctoral School

1. Study Curriculum Przew is understood as a selection of taught courses and other forms of teaching organised by the Doctoral School for its participants.
2. Some of the courses may be taught in English.
3. After obtaining DS Director's consent it is possible to obtain credit for a course on a date different from the one stipulated in DS Study Curriculum.
4. After completing a course in each subject from the Study Curriculum the education outcomes achieved by doctoral students are verified through exams, credits, or credits with a grade.
5. The form of a credit is defined in the Study Curriculum time schedule.
6. The teacher running a particular course informs the doctoral students about the form of the exam or requirements for completion of the course at the beginning of the course. The completion of a course may have a form of written work, projects, presentations (also presentation of a work of art), and on the basis of a grant application submitted by the student, academic publication, conference presentation, work of art or other activities agreed with the teacher.
7. Table 2 contains the Study Curriculum Time Schedule with the minimum teaching hours, form of credit, and minimum number of ECTS points.

Table 2. Study Curriculum

YEAR I

1st SEMESTER				
SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
Philosophy of Science	14	2	Z	Course compulsory for all students, with the exception of the discipline: Fine Arts and Arts Conservation
Academic writing I	14	2	O	
Ethics in science	12	1	Z	
Esthetics	14	2	O	Courses compulsory for the discipline: Fine Arts and Arts Conservation. As optional courses PhD students may also select optional courses e.i. Philosophy of Science, Ethics in science, and Academic writing I
Optional courses/ Interdisciplinary lectures	26	3	Z	
Individual seminar 1	10	2	Z	Course compulsory for all students
Total	50	7		

Finding a supervisor (within 3 months of the beginning of sem. 1)

2nd SEMSTER				
SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
Grant projects 1	14	2	z	
Basic Research Methodologies for respective areas	20	4	E	Each DS participant can additionally participate in courses on Basic Research Methodologies for other areas. Having obtained a credit on the basis defined by the teacher (but without the need to take an exam) the participant receives 2 points, which is synonymous with completing an optional course and receiving 2 ECTS points.
Optional courses / Interdisciplinary workshops	12	2	z	Non-compulsory courses in case of receiving 2 ECTS points through completing a course on Basic Research Methodologies for an area different from one's own
University Didactics I	10	2		
Individual Seminar 2	10	2	z	
Public reporting session	10	1	o	
Total	76	13		

Submitting the Individual Research Plan after completing 2nd semester. Recommendation: participation in a summer school.

YEAR II

3rd SEMESTER				
SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
Grant Projects 2	8	2	O	
Academic writing 2	12	2	o	Course compulsory for all students, with the exception of the discipline: Fine Arts and Arts Conservation

Optional courses / Interdisciplinary workshops	12	2	O	Course compulsory for all students, with the exception of the discipline: Fine Arts and Arts Conservation
Project presentation	10	2		
University Didactics 2	12	2		Within specific disciplines
Methodology of a discipline	30	4		Within specific disciplines
Individual seminar 3	10	2	z	
Total	82	14		

Recommendation: submitting a grant application before the end of the calendar year.

4th SEMESTER				
SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
Specialist Workshop /Guest lecture **	24	4	z	Within specific disciplines
Optional courses / Interdisciplinary workshops	12	2	z	
Individual seminar 4	10	2	z	
Public reporting session	10			
Total	56	9		

Mid-term evaluation.

YEAR III

5th SEMESTER				
SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
Specialist Workshop / Guest lecture	12	2	z	Within specific disciplines.
Optional courses / Interdisciplinary workshops *	12	2	z	
Individual seminar 5	10	2	z	
Total	34	6		

Recommendation: internship in Poland or abroad.

6th SEMESTER				
SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
Specialist Workshop/Guest lecture **	12	2	z	Within specific disciplines
Individual seminar 6	10	2	z	
Total	22	4		

Recommendation: active participation in an international conference or a exhibiting a work of art at an international event.

YEAT IV

7th SEMESTER				
SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
Specialist Workshop/Guest lecture **	12	2	z	Within specific disciplines
Individual seminar 7	10	2	z	
Total	22	4		

8th SEMESTER				
SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
Optional courses / Interdisciplinary workshops *	12	2	z	
Individual seminar 8	10	2	z	
Total	22	4		

EXPLANATIONS: forms of completion: O — credit with a grade; Z — credit; E — examination

* A list of optional courses to choose from – see table 3. The final list of optional courses for a given year, with number of hours and ECTS points shall be announced by DS Director before the end of September.

** A detailed list of specialised workshops for a given year for respective disciplines shall be announced by DS Director before the end of September, after obtaining an opinion of respective discipline council.

8. It is additionally decided that:

- 1) the minimum number of optional courses to choose from in a given year is 10;
- 2) the number of hours and ECTS points is proposed by the teacher and approved by DS Director;
- 3) DS Director decides about opening a given course on the basis of the number of applications
- 4) some courses may be taught through e-learning
- 5) some courses may be taught in English.

Table 3. Optional courses to choose from for all disciplines (unless remarked otherwise)

SUBJECT	HOURS	ECTS	FORM OF CREDIT	REMARKS
WORKSHOPS				
Interdisciplinary workshop / Guest lecture			Z	May appear a number of times, depending on an offer.
OTHER				
Axiology			Z	
Digital Literacy			Z	
Databases (WoS/Scopus)			Z	Run by the UP Main Library
Data Mining			Z	
Philosophy of Arts			Z	
History of science			Z	
Organisation of Higher Education			Z	
Institutional conditions for Arts			Z	
Creativity in science			Z	
Logics			Z	
Citing tools			Z	Online course.
Communication in science			Z	
Natural sciences in humanities			Z	
Public opinion research			Z	
Career planning			Z	Online course.
Culture of language			Z	
Work pragmatics in a research team			Z	
Mobility programmes			Z	Online course.
Semiotics in science and arts			Z	
Sociology of knowledge			Z	
Sociology of literature and arts			Z	

Patents and implementations			Z	
Processes of globalisation			Z	
Advanced statistics			Z	
Contemporary political systems			Z	
Groupwork techniques			Z	
New media theory			Z	
Professional skills of a researcher			Z	
Intercultural communication			Z	
Data visualisation			Z	
Contemporary philosophical trends			Z	
GIS in research			Z	
The art of negotiation and mediation			Z	
Video skills			Z	Online course.
Social communication tools			Z	
Eye-tracking			Z	
Open Access			Z	Online course.
Civilisation changes across the ages			Z	

9. DS Study Curriculum also comprises:

- 1) obligatory H&S course in the 1st semester;
- 2) obligatory course on Protection of intellectual property on University Moodle platform;
- 3) obligatory antidiscrimination workshop on University Moodle platform.

10. Teaching practice is an integral part of the DS Study Curriculum, it comprises 60 hours, including 15 hours of assistant practice and 45 hours of academic teaching. Assistant practice can be started in the 3rd semester and teaching can start in the 4th semester.

11. Completion of the activities from points 9 and 10 are confirmed by DS Director in consultation with supervisor(s) or other academics.

SECTION IV Individual Research Plan

1. The regulations concerning IRP are defined in point 18 of DS Rules.
2. When delineating the IRP the supervisor (or supervisors) is responsible for making sure it contains education outcomes for qualifications at grade 8 of Polish Qualifications Framework, in particular, the supervisor makes sure that the doctoral student develops:

- 1) the ability to use knowledge on different areas for creative identification, formulation and innovative solution to complex problems or performing research or artistic activities;
- 2) the ability to independently plan their own development and career path;
- 3) 3) the ability to critically assess the output of a given academic or artistic discipline, and one's own contribution to the development of the discipline;
- 4) the ability to plan and carry out individual and group research or artistic activities;
- 5) The awareness of social commitments of researchers and artists;
- 6) academic and artistic independence.

3. Within the frames of IRP it is the candidate's obligation to:

- 1) apply for at least one research or artistic grant;
- 2) present a paper at least at one international or national conference, or carry out an artistic project significantly contributing to culture;
- 3) complete at least one research and teaching, artistic, or teaching internship, in Poland or abroad, lasting at least 30 days;
- 4) complete at least one significant work of art, or publish at least :
 - a. one academic article in an academic journal or in peer-reviewed international conference proceedings that, in the year of publication, was in the ministerial list of academic journals, or
 - b. one academic monograph published by a publishing house which in the year of the monograph publication in its final version was in the ministerial list of publishers, or
 - c. a chapter in the monograph defined above;
- 5) have at least one achievement in the field of popularisation of science;
- 6) pass the diploma exam (as defined in SIO p. 5 of DS Rules) — having obtained a positive result at mid-term evaluation, and before completing the programme.

4. Additionally within the frames of IRP an DS student may:

- 1) take part in a summer school (summer schools) organised by UP or other centres;
- 2) participate in training sessions organised by UP or other centres;
- 3) complete online courses whose completion is confirmed, if possible, by a certificate, or confirmed by the supervisor (supervisors),
- 4) complete additional internships or practice.