PRK VII

Full qualification at Polish Qualifications Framework level seven and European qualification frameworks

UNIWERSYTET WROCŁAWSKI
we Wrocławiu

DIPLOMA

(COPY)

OF SECOND CYCLE PROGRAMME

ISSUED IN THE REPUBLIC OF POLAND

FACULTY OF BIOTECHNOLOGY

Piotr Paweł
name/names

Piszczek
surname

19th February 1998
date of birth

Cracow
place of birth

form full-time

the field of Biotechnology

major Molecular Biology

discipline Medical Sciences

profile Academic profile

the final grade bardzo dobry

the degree awarded magister date 6th September 2024

Dean

prof. dr hab. Dorota Nowak

UNIWERSYTET WROCŁAWSKI official seal

Rector
z up. Rektora
Prorektor ds. nauczania

dr hab. Łukasz Machaj, prof. UWr

No 3879/2024

Wrocław, date 9th September 2024

AA 0068882

Official stamp of the awarding Higher Education Institution

Uniwersytet Wrocławski

DIPLOMA SUPPLEMENT (COPY)

Valid with the Diploma no 3879/2024

1. INFORMATION ABOUT THE GRADUATE

1.1. Surname: *Piszczek*
1.2. Names: *Piotr Paweł*
1.3. Date of birth (day, month, year): *19.02.1998*
1.4. Student identification number: *307074*

2. INFORMATION ABOUT THE DIPLOMA[1)]

2.1. Professional title[2)]: *magister*
2.2. Field and profile of study: *Biotechnology, specialty Molecular Biology, academic profile*
2.3. Name and status of awarding institution[2)]:
Uniwersytet Wrocławski
The University of Wrocław was established with the Golden Foundation Bull of Emperor Leopold I on October 21, 1702. By the Act of Polish Parliament of August 24, 1945, the University was nationalized and became a public higher education school. The University of Wrocław is accredited by the Polish Ministry of National Education and Science to award licencjat, magister, doktor and doktor habilitowany degrees as well as to advise on awarding the academic title of State Professor.
2.4. Name and status of institution administering studies[3)] (if different than in 2.3.):
not applicable
2.5. Language(s) of instruction/examination: *Polish*

3. INFORMATION ABOUT THE LEVEL OF EDUCATION

3.1. Level of education held[4)]: *second cycle - magister degree programme, full qualification at Polish Qualifications Framework and European Qualifications Framework level seven*
3.2. Duration of studies according to study programme: *2-years*
3.3. Admission criteria: *BSc diploma and interview*

4. INFORMATION ABOUT THE CONTENT OF STUDIES AND RESULTS ACHIEVED[1)]

4.1. Form of studies: *full-time*
4.2. Learning outcomes:

The programme of study is implemented in accordance with Resolution No 133/2019 of the Senate of the University of Wrocław of 25 September 2019 on study programme for the fields of study offered by the University of Wrocław in accordance with the National Qualifications Framework for Higher Education and Resolution No 73/2020 of the Senate of the University of Wrocław of 24 June 2020 amending the resolution on study programme for fields of study at the University of Wrocław.
The learning outcomes defined in the Resolution No 133/2019 of the Senate of the University of Wrocław are characterised in terms of knowledge, skills and social competences.
General learning outcomes:
Upon successful completion of the second degree studies in Biotechnology, the graduate has knowledge of medical and biological sciences, namely biochemistry, biotechnology, biomedicine, bioinformatics and molecular biology, allowing for a multidisciplinary approach to solving future professional tasks. In his or her professional career the graduate is able to efficiently use bioinformatic tools and scientific literature both in Polish and English. On top of that the graduate has the ability to discuss professional matters in Polish and English with other specialists.
The graduate knows how to organise individual and group work in the laboratory in compliance with bioethical standards and laboratory safety procedures. The graduate possesses the knowledge of how to apply for funds to carry out research and implement projects, is familiar with the general principles of establishment and development of individual forms of entrepreneurship and has basic understanding of biotechnology industry. The graduate is also able to continuously advance his or her professional career and improve their skills.

Upon successful completion of the second degree studies in Biotechnology (in one selected area from among: Medical Biotechnology; Molecular Biology; Molecular Microbiology; Peptide and Protein Biotechnology or Bioinformatics) the graduate:

KNOWLEDGE
K_W01 provides qualitative and quantitative descriptions of complex biological phenomena and processes
K_W02 consistently applies and disseminates the principle of strict interpretation biological phenomena and biochemical processes in research and practical activities which are based on empirical data K_W03 possesses advanced knowledge of medical and biological sciences, namely biochemistry, biotechnology, biomedicine, bioinformatics and molecular biology
K_W04 possesses in-depth knowledge of molecular evolution, genetics, structural biology and microbiology essential in understanding relationships and interrelations in biological systems K_W05 possesses knowledge of the current issues prevailing in scientific literature in the field of biotechnology, including medical biotechnology
K_W06 possesses understanding of statistics related to modelling biological phenomena and biotechnological processes and is familiar with bioinformatics tools
K_W07 has the ability to design research projects based on protein engineering, genetical engineering, structural and molecular biology, microbiology and liposome technology
K_W08 possesses knowledge of how to obtain and settle funds to implement scientific and application projects in the fields of biotechnology and biomedicine
K_W09 is familiar with the basic principles of health and safety and ergonomics procedures in the laboratory and follows the procedures of working with genetically modified organisms
K_W10 is aware of and understands the basic concepts and principles of the protection of intellectual and industrial properties and copyrights, and draws on the resources of patent information
K_W11 is familiar with the general principles of the creation and development of individual forms of entrepreneurship in biotechnology

SKILLS
K_U01 properly chooses and applies advanced technology and research tools in medical and biological sciences, namely biochemistry, biotechnology, biomedicine, bioinformatics and molecular biology K_U02 efficiently makes use of scientific literature in the field of biomedicine and biotechnology; reads professional literature in English
K_U03 shows ability to critically analyse and select information, especially from electronic resources, including literature and sequential databases
K_U04 formulates and tests hypotheses, plans and performs research tasks and analyses under the supervision of a tutor
K_U05 uses statistical methods, computer tools and technology to describe biological and biotechnological phenomena and perform analysis of specialist data
K_U06 collects and interprets experimental data, is able to synthesise it and make appropriate conclusions
K_U07 shows ability to formulate legitimate opinions on the basis of data derived from different sources
K_U08 has the ability to prepare oral presentations of the details of research using a variety of different media, address the presentations to various recipients and conduct debates
K_U09 writes research papers and brief scientific reports in English based on his or her own research
K_U10 independently plans his or her own professional or scientific career
K_U11 collaborates and works as part of a team in order to plan research, solves problems and manages the work of team members
K_U12 speaks English at B2+ level as required by European Framework of Reference for Languages

SOCIAL COMPETENCES
K_K01 understands the need for lifelong learning, can inspire and organise the learning process for other people
K_K02 critically evaluates his or her own knowledge and information
K_K03 adequately prioritises in order to carry out specific research projects
K_K04 correctly identifies and resolves dilemmas and adheres to ethical principles of the profession of biotechnology
K_K05 understands the need for a systematic review of professional literature in order to broaden and deepen his or her knowledge, recognizes the importance of knowledge for solving cognitive and practical problems
K_K06 shows ability to assess the risks of research techniques in biotechnology; arranges a safe workplace
K_K07 regularly reviews biotechnological knowledge and its practical applications, understands the need

for consulting with experts when faced with a problem
K_K08 thinks and acts in an entrepreneurial manner

4.3. Details of graduate's studies: courses completed, individual achievements, ECTS credits obtained:

Courses by didactic cycles	Type/No. of hrs	Grade	ECTS
Winter semester 2021/22			
Erasmus+	*pro*	*[5]*	*27*
Initial training in the field of health and safety and fire protection	*kint 4*	*[zal]*	
Summer semester 2021/22			
Bioinformatics	*cw 15*	*[5]*	*1*
Bioinformatics	*wyk 15*	*[5]*	*2*
Computer Programs used in Research Work	*sem 15*	*[5]*	*1*
Elective Lecture: Data Analysis and Visualization with the R Program	*wyk 15*	*[5]*	*2*
Elective Lecture: Genetic Engineering of Bioproducts	*wyk 15*	*[5]*	*2*
Internship	*prk-zaw*	*[5]*	*6*
Laboratory Practice in Genetic Manipulation	*wyk 15*	*[4,5]*	*2*
Master Thesis Seminar	*sem 30*	*[5]*	*3*
Optional German course A1-II	*lek 60*	*[5]*	*4*
Seminar in English	*sem 15*	*[5]*	*2*
Specialization Laboratory	*prac 150*	*[5]*	*8*
Systems Biology	*wyk 15*	*[5]*	*1*
Systems Biology	*cw 30*	*[5]*	*2*
Winter semester 2022/23			
Career Development and Management Principles in Biotechnology	*wyk 15*	*[5]*	*1*
Economics	*wyk 30*	*[5]*	*2*
English course B2+	*lek 60*	*[5]*	*4*
Master Thesis Laboratory	*prac 135*	*[5]*	*13*
Master Thesis Seminar	*sem 30*	*[5]*	*3*
Selected Aspects of Gene Therapies	*wyk-egz 15*	*[4]*	*2*
Selected Aspects of Gene Therapies	*cw 45*	*[4,5]*	*3*
Virology	*wyk 30*	*[5]*	*3*
Summer semester 2022/23			
Funds Market and Enterprise Financing	*wyk 15*	*[5]*	*1*
Master Thesis Laboratory	*prac 240*	*[5]*	*25*
Master Thesis Seminar	*sem 30*	*[5]*	*3*
Spin-off Companies and Micro-enterprises	*wyk 15*	*[5]*	*2*

Course code description

cw	*class*	*kint*	*e-learning course*
lek	*foreign language class*	*prac*	*lab*
prk-zaw	*professional experience*	*pro*	*project*
sem	*seminar*	*wyk*	*lecture*
wyk-egz	*lecture*		

Grades outside brackets are course grades, grades inside brackets are grades for the classes, vertical bar separates grades for various classes, semicolon separates grades on various exam reports, space separates grades on the same exam report, order of grades on a report follows order of exam sessions.

Topic of diploma dissertation			
Development of strategies to modify the activity of cyanogenic glycoside metabolism genes leading to changes in amino acid and protein synthesis			
Components of the final grade			
Name of the component	Weight	Grade	ECTS credits
Average grade:	*0,5*	*4,92*	*125*
Thesis grade:	*0,25*	*Bardzo dobry*	*0*
Final examination grade:	*0,25*	*Bardzo dobry*	*0*
ECTS in total:			125

4.4. Grading scale and, if possible, the way grades are awarded:
Grade system and method for assigning grades are set out in Study Regulations of the University of Wrocław.

Grades used at examinations, test, and other assessments of student performance are as follows:
1) bardzo dobry (bdb) - 5,0 (very good)
2) plus dobry (+db) - 4,5 (plus good)
3) dobry (db) - 4,0 (good)
4) plus dostateczny (+dst) - 3,5 (plus satisfactory)
5) dostateczny (dst) - 3,0 (satisfactory)
6) niedostateczny (ndst) - 2,0 (fail)

Average grade is calculated according to the rules set out in Study Regulations of the University of Wrocław.

The Final Scholastic Standing of an alumnus is reflected by the grade (and quality point value) on the graduation diploma.

4.5. Result of graduation (degree)[2]: *bardzo dobry*

5. INFORMATION ABOUT THE GRADUATE'S ENTITLEMENTS

5.1. Access to further education: *doctoral studies, postgraduate studies*
5.2. Academic and (if possible) professional qualifications held[5]:
not applicable

6. ADDITIONAL INFORMATION[1]

6.1. Additional information, including completed internships and awards received:
BioLAM internship in years 2023-2024, University of Virginia.
Rector's scholarship for the best students in the academic year 2022/2023.
Laboratory workshop on 4.05.2022, Wroclaw Technology Park.
Internship: Internship from 01.07.2022 to 30.09.2022 (3 miesiące), at: Max-Planck Institute of Molecular Plant Physiology
Internship abroad at Univerzita Karlova v Praze from 01.10.2021 to 25.02.2022
6.2. Sources of information:
Home University website: www.uni.wroc.pl
Faculty website: www.biotech.uni.wroc.pl
The State Accreditation Committee website: www.pka.edu.pl
Ministry of Education and Science: www.nauka.gov.pl
The Polish National Agency for Academic Exchange: www.nawa.gov.pl

7. AUTHENTIFICATION OF THE SUPPLEMENT

7.1. Date of making the supplement: *9th September 2024*

7.2. Signature and name stamp of the rector[6], or a print of information contained on the stamp:

prof. dr hab. Dorota Nowak
dziekan

7.3. Official university stamp:

1) Points 2.3, 2.4, 4.2–4.4, 6.1 and 6.2 can be extended by an appropriate number of pages, depending on the needs.
2) In the case of translation into a foreign language, the name of the university should be left in the original form, and the professional title and the result of studies (degree) – in the Polish language
3) The status of the university administering the studies should be indicated as public/private while the names of universities or institutions jointly running the studies should be given in their original form.
4) Indicate the level of the Polish Qualification Framework of the qualification confirmed by the diploma.
5) In the case of studies preparing to practice as a teacher, it is confirmed that the graduate:
   a) has completed education in accordance with the standard of education preparing for the teaching profession,
   b) has obtained preparation for the teaching profession with an indication of the subject or type of classes that he / she can conduct.
6) Alternatively, the document may be signed and stamped by an authorised person, holding an executive position at the university.

8. INFORMATION ABOUT HIGHER EDUCATION IN POLAND

8.1. Admission criteria

The total schooling time needed for the completion of secondary education, entitling a person to take a school leaving matura exam, is 12–15 years. After they pass the matura exam, graduates of secondary schools receive a certificate of secondary education, which allows them to apply for admission to higher education.

8.2. Higher education

The rules for the functioning of higher education are laid down in the act of 20 July 2018 – Law on Higher Education and Science (Journal of Laws, 2022, item 574, as amended).

Public institutions of higher education are set up by the state. They conduct higher education studies as first-cycle studies, second-cycle studies and long-cycle studies. Studies can be offered as full-time and part-time programmes.

Full time first-cycle studies last at least 6 semesters, and, if the learning outcomes include engineering competences – at least 7 semesters. Full-time second-cycle studies last from 3 to 5 semesters. Long-cycle studies last from 9 to 12 semesters.

Part-time studies may last longer than equivalent full-time studies.

The qualifications obtained as a result of graduation are assigned a level of the Polish Qualifications Framework, specified in the Act on Integrated Qualifications System of 22 December 2015 (Journal of Laws, 2020, item 226).

The diploma of completion of first-cycle studies confirms the award of level 6 full qualification of the Polish Qualifications Framework.

The diploma of completion of second-cycle studies and long-cycle studies confirms the award of level 7 full qualification of the Polish Qualifications Framework.

8.3. Professional titles awarded to graduates of higher education studies

1) Licencjat, inżynier and their equivalents: inżynier architekt, inżynier pożarnictwa, licencjat pielęgniarstwa, licencjat położnictwa – awarded to graduates of first-cycle studies;
2) Magister, magister inżynier and their equivalents:
   a) Magister inżynier architekt, magister inżynier pożarnictwa, magister pielęgniarstwa, magister położnictwa – awarded to graduates of second-cycle studies;
   b) Lekarz, lekarz dentysta, lekarz weterynarii, magister farmacji, magister inżynier architekt, magister inżynier pożarnictwa – awarded to graduates of long second-cycle studies.

8.4. ECTS credits

In order to receive the diploma of completion of first-cycle studies the student is required to obtain at least 180 ECTS credits, for the diploma of completion of second-cycle studies – at least 90 ECTS credits, and for the diploma of completion of long-cycle studies – at least 300 ECTS credits, if they last 9-10 semesters, and at least 360 ECTS credits, if they last 11-12 semesters.