

**Agreement between
the University of Žilina and
Zhetysu University named after Ilyas Zhansugurov
concerning the management of the
double degree diploma educational program
Biology/Mountain and alpine ecology
Academic degree received: Master**

1. Rationale for the double degree diploma study programme

The need for a cooperative programme arose from the long-term cooperation of the partner institutions in the field of above mentioned research to produce highly qualified new experts in the water management of the high mountains (For the details see Appendix 1)

2. Contracting parties

1) University of Žilina

Univerzitná 8215/1 010 26 Žilina, Slovakia

ID: 00 397 563

hereinafter referred to as "UNIZA"

and

Zhetysu University named after Ilyas Zhansugurov, Taldykorgan, I. Zhansugurov Street, 187A, Taldykorgan, 040009, Republic of Kazakhstan
hereinafter referred to as "Zhetysu University"

2) The purpose of this agreement is to record the decisions and the involvement of the cooperating institutions to run the master double degree diploma programme "Biology/Mountain and alpine ecology" and terms of their cooperation. The two universities involved in the cooperation (UZ and ZHETYSU UNIVERSITY) are accredited to offer master's programmes, according to their respective national legislation. This agreement will be implemented within the legal requirements at each cooperating institution. The provisions of this agreement shall not be interpreted so as to diminish the fully autonomous position of any of the institutions.

3) This contract regulates the conditions of cooperation of the contracting parties within the UNIZA study programme and the ZHETYSU UNIVERSITY study programme, which enable the contracting parties to award students a double diploma/degree.

4) The goal of the cooperation between UNIZA and the ZHETYSU UNIVERSITY is to agree on the conditions of issuing a Double degree after completing the study programme at both institutions, to the extent agreed in this agreement. The purpose of this type of study is to acquire a wider range of knowledge, skills and abilities in the science and education of high mountain ecology processes, better language skills and better intercultural communication. The compatibility of both below - mentioned study programmes enables the issuance of a Double Degree, which provides students with more opportunities for further education as well as competitive advantages when seeking employment on the Asian, European and global labour market.

Classification of study branches of current programmes:

Natural Sciences: Ecological and Environmental Sciences (UNIZA)

Pedagogical Sciences: 7M015 Training of teachers in natural science subjects (Biology) (ZHETYSU UNIVERSITY)

3. Structure and organisation of the cooperation, definitions

Double Degree - a diploma (degree) awarded to the student by both universities upon fulfilment of the conditions set by these institutions in their internal regulations, in this contract and the contracts connected to it ("Double Degree"). The collaborating institutions will have equal responsibility in coordinating the master's programme. Both institutions have the responsibility for the implementation of administrative matters in accordance with this agreement and the programme description curriculum agreed upon. The cooperating institutions will ensure the academic and administrative capacity necessary to execute this agreement at their own institutions, as well as supporting the administrative structures and capacity at the coordinating institution.

4. General provisions

1) The contracting parties confirm that their current study programmes are properly accredited in accordance with the national legislation, requirements and quality assurance systems of the countries where the universities are based. Academic requirements for teachers must be in accordance with the minimum standards of national accreditation and rules of both cooperating institutions.

2) Both universities will provide each other with an overview of their quality assurance systems and relevant accreditation.



3) Both partners undertake to cooperate in the process of accreditation and provision of all data necessary for the process of accreditation of the abovementioned study programs.

4) Both cooperating institutions will carry out coordinated education surveys within the above mentioned study programs with the aim of constantly improving the quality of education.

5) Issuance of a Double Degree and the conditions for its award are within the competence of each of the partners.

6) The study program is implemented in accordance with UNIZA study regulations, and ZHETYSU UNIVERSITY study regulations.

5. Admission, registration and finance

1) Students are subject to standard rules and regulations regarding registration at their own institution, and are registered at both institutions.

2) During the stay at the host Institution (ZHETYSU UNIVERSITY students in Slovakia or UNIZA students in KAZAKHSTAN), students will have access to all student services provided by the host Institution.

3) Each partner institution is financially responsible for covering the costs of the courses held at their institution.

4) The cooperating institutions will develop a recruitment plan for the programme. The recruitment process and plan will be made at both institutions according their national and university rules.

5) Each student admitted to the programme is enrolled at both universities for the length of the programme. Students will normally be subject to the regulations and procedures of the institution at which they follow courses and sit for examinations in a given semester. They will be provided with the same academic resources and support services that are available to all students at that institution.

6) Students from the EU and EEA member countries, as well as students from partner universities elsewhere, do not pay school fees. The UNIZA will not charge tuition fees for Zhetysu University students.

7) Students will be financially responsible for travel to and from the institutions they are attending during the length of the programme but institutions will look for potential sources to (projects, grants) to support students, travel documentation, visas, etc., insurance coverage relevant to their stay in a given country.



6. Content of the double degree study and programme structure

1) The double degree master's programme is based on Biology/ Mountain and Alpine Ecology“

2) The joint master' s programme will be offered as a full time study programme of minimally 120 credits. Students are required to complete credits according to their study plan .

3) The nominal length of study is two years. The study programme will be approved by both institutions involved according to local regulations. The study programme and degree will be bound by the legal framework of both institutions and the rights of students will be secured within this framework. The language of the master's programme is English or Russian

4) The cooperating institutions have agreed on a programme description /curriculum for the double degree master' s programme, outlining common objectives, admission requirements, admission procedures, core contents, curriculum and structure for the programme.

5) The description of the study programme is addendum to this agreement.

6) Students must sign a Master thesis agreement according to the regulations of each partner. Both partners will present available supervisors and topics for master' s thesis to the students during the first semester of their study. The grading scales for each courses module are in accordance with national and institutional regulations.

7) All written exams, assignments and the master's thesis will be subject to plagiarism control.

8) Student mobility but also on line teaching is an essential and integrated part of the master's programme.

9) The master' s programme will be subject to systematic evaluation and quality assurance according to national rules. Each institution will evaluate the study results of all Students according to the same criteria as are used for students registered in the relevant accredited study program at the relevant institution.

7 Supervision

1) Each party is responsible for the implementation of the terms of this contract and nominates a responsible person (coordinator) who will ensure that the Double Degree Study Program is in accordance with the curriculum goals of their institution and the interests of the students.

2) Coordinator at UNIZA: prof. Marián Janiga



3) Coordinator at Zhetysu University: Candidate of Biological Sciences Berikzhan Oxikbayev.

4) Coordinators will discuss the quality, possible changes and adjustments in the Double Degree Study Programs, with the aim of improving the connection of both study programmes and ensuring the highest possible quality of the Double Degree as a whole.

8 Dispute resolution

All disputes arising from the application or interpretation of this contract shall first be discussed between the parties with the aim of reaching a mutually out-of-court settlement. This contract is governed by the laws of the Slovak Republic and Republic of Kazakhstan

9. Final Provisions

1) This contract enters into force on the date of its signature and may be subject to modification only by mutual written agreement.

2) This contract is concluded for a fixed period of 5 years from the date of its conclusion.

3) The contract can be terminated by notice from any of the parties with a notice period of 12 months from the date of delivery of the notice to the other party. In case of premature termination of the contract, Students who started their studies in the Double Degree Study Program before the notice of termination is delivered will be entitled to its proper termination.

Signatures



Yermek Buribayev

Chairman of the Board – Rector

Zhetysu University named after I. Zhansugurov

Place/Date



Rector

University of Žilina

Appendix 1

Research on water and water resources is of paramount importance in today's world for several compelling reasons. The rapid expansion of the global population, industrial growth, and the extension of farming territories are contributing to an escalating water shortage that intensifies year after year. Water-related climate risks affect food, energy, urban, and environmental systems.

Cooperation between the Zhetysu University (KZ) and Žilina University (SK) started in 2014 in the field of education and has gradually expanded to include student internships, academic lectures and research activities. This has resulted in joint scientific publications in the field of water resources research and ecotoxicology of aquatic and terrestrial ecosystems.

The cooperation is exactly between the Higher School of Natural Sciences, Zhetysu University named after Ilyas Zhansugurov, Taldykorgan (Kazakhstan) and the Institute of High Mountain Biology, University of Žilina (Slovakia). The main objective is to address the need for linkages in education with an emphasis on research and the acquisition of practical skills in high mountain ecosystem research. The transfer of experience and good practice from the research field to the education field has the potential to prepare candidates to be flexible in their future orientation, in particular by: *acquiring interdisciplinary knowledge* (more effective learning within the ecological sciences, ability to implement research activities), *gaining practical experience*, *developing communication skills*, *developing critical thinking* and *analytical skills* needed for career growth in both academic and non-academic environments. The study program takes into account the transformation of the educational system of the Republic of Kazakhstan caused by the modernization of the educational system and the need to form a new value system aimed at the preparation of competitive professionals in higher education.

The significant contribution of new knowledge, especially in the field of ecotoxicology of water and mountain ecosystems, offers opportunities to expand research activities and link them to practical activities in education.

Nine out of ten natural disasters are water-related, making water management a core component of climate change adaptation strategies. More than one billion people currently lack adequate access to water resources, and this number is projected to increase, with up to 50% of the world's population potentially suffering from water scarcity within the next 15-20 years. Recognising, measuring and incorporating the value of water into decision-making processes is essential for sustainable and equitable water resource management. Climate change affects the chemical and microbiological contamination of water, with significant implications for public health, but also degrades river water quality, threatening ecosystem health and human access to clean water.

Twenty-four per cent of the Earth's surface is covered by alpine areas, and mountains are found in all biogeographical regions of the world. They contain a wide variety of climates, geological and physiographic features and are the source of much of the world's water. Because of their history, isolation and great

variability of habitat, they are treasuries of high biodiversity and rich in endemic species. Alpine areas are also important centres of agro-biodiversity with a great variety of locally adapted crops and livestock, an important genetic resource and an asset for assuring food security for a growing global population. Today, alpine ecosystems are facing enormous pressure from global changes related to drivers such as climate change, pollution, increased human population, and changes in land use that place added demands on the alpine ecosystems. Especially climate change is one of the major challenges of our time, and mountain regions around the world are known to react especially sensitive on global warming. Both direct instrumental records and environmental records indicate that historical and recent changes in climate in many mountain regions of the world are often greater than those observed in the adjacent lowlands. Many glaciers disappear; the water regime is changing, and the processes influence surrounding areas. In high mountains, plants and animals are in a tight corner. Unlike temperate species, they have fewer capabilities for coping with change, yet the ecological 'islands' they inhabit are shrinking as global warming goes on, and climate change has already triggered species distribution shifts in many parts of the world. Mountains represent unique areas for the detection of climatic change and the assessment of climate-related impacts.

Appendix 2

Recommended study plan for students

Semester	Discipline	ECTS (credits)	Obligatory (O) / Elective (E)	Unit Institute of High Mountain Biology (IHMB) / Zhetysu University (ZhU)
1	History of philosophy and science	4	O	ZhU
1	Higher school pedagogy	4	O	ZhU
1	Water, air and climate change	6	O	IHMB
1	Statistical analysis	6	O	IHMB
1	Organization and planning research	4	O	IHMB / ZhU
1	Scientific research work of the master student	6	O	IHMB / ZhU
2	Foreign language (professional)	4	O	ZhU
2	Psychology of management	4	O	ZhU
2	Strategies for the protection of mountain ecosystems	5	O	IHMB
2	Biology of high mountains	6	O	IHMB
2	GIS (Geographic Information Systems) - physical geography of mountain ranges	5	E	IHMB
	Environmental forensic methods			
2	Scientific research work of the master student	6	E	IHMB / ZhU
3	Pedagogical practice	4	O	ZhU
3	Comparative anatomy of higher plants	6	E	ZhU
	Comparative anatomy of vertebrates			
3	Methods of teaching biology in the university	5	E	ZhU
	New approaches in teaching biology			
3	Modern problems of molecular biology	5	E	ZhU
	Protection and preservation of biodiversity protection			
3	Ecological methods	5	E	IHMB
	Pollution and microbiology			
3	Scientific research work of the master student	5	O	IHMB / ZhU
4	Scientific research work of the master student	7	O	IHMB / ZhU
4	Research practice	15	O	IHMB / ZhU
4	Design and defense of a master's thesis	8		IHMB / ZhU