

## **Needs assessment missions undertaken in the framework of the Erasmus+ project**

### **"Human Capacity Development for the Water Sector Central of Asia the Strengthen Resilience to Climate Change and Support Sustainable Development, Peace and Security" HWCA**

#### **Kazakh-German University (DKU)**

**Partner universities are kindly requested to answer the following questions in writing:**

#### **I. Number of students / capacities**

##### **1. Thematic profiles of water programs**

There is MA Education program “7M04113 Integrated management of water resources” in DKU. Training program: “7M041 Business and Administration”. Thematic profile is water resources.

##### **2. Number of BA, MA and PhD students studying these programs**

In the Kazakh-German University (DKU) under the MA educational program "Integrated Water Resources Management" (IWRM) are trained: **11 MA students** in the first year of study, **7 MA students** in the second year of study. Total number of the MA students is **18**.

##### **3. Number and thematic profile of teaching staff (full professors, associate professors, assistant professors, lecturers)**

The main academic staff the IWRM MA program are professors of the flying faculty. Flying faculty professors teach more than 60% of all subjects in the IWRM MA program, which are included in the blocks of basic disciplines of the elective component and profile disciplines of the university component. The teaching of subjects by professors from Europe is the basis for the transfer of international experience in water management to MA students from Central Asia.

The following numbers of the Academic staff of IWRM MA program:

Visiting professors - 9

Full professors - 1

Lecturers - 6

##### **4. Present capacities to teach economic, financial, institutional, political subjects to BA and MA students**

The MA program "IWRM" is located at the Faculty of World Politics, where political disciplines are taught. Institutional disciplines are conducted by the Academic staff of the UNESCO Department of Water Resources Management in Central Asia and visiting professors. The teaching of economic disciplines is carried out by the Academic staff of the DKU Faculty of Economics and Business.

##### **5. List of teaching staff capable of delivering lectures in English**

Since 70% of the subjects in the IWRM MA program are taught in English, all teachers speak English.

No.	Name and surname	Core University (company)
1	Prof. Dr. Tilman Rost	Freie Universität Berlin, Germany
2	Prof. Dr. Michael Walther	National University of Mongolia
3	Dr. PhD Denis Krutov	Moscow State Environment Management University, Russia
4	Dr. Heinrich Wyes	Regional Environmental Centre for Central Asia (CAREC), Germany
5	Dr. Lutz Mez	Freie Universität Berlin, Germany
6	Dr. Gernot Kayser	Technische Universität Dresden, Germany
7	Dr. Jenniver Sehring	IHE Delft for Water Education, The Netherlands
8	Dr. Barbara Janusz-Pawletta	DKU, Kazakhstan
9	PhD Larissa Kogutenko	DKU, Kazakhstan
10	PhD Viktoria Krylova	DKU, Kazakhstan
11	Dr. Iskandar Abdullaev	Regional Environmental Centre for Central Asia (CAREC), Uzbekistan
12	Dr. Peter Leibelt TBC	Central Asian Sustainable Innovation Bureau (CASIB), Kazakhstan

6. Estimated proportion of students able to follow courses in English or use textbooks in English

100% of MA students enrolled in the IWRM program are able to follow courses and use textbooks in English.

## II. Description of curricula

7. Short description of BA curricula relevant for water resources management (subjects, modules, language of instruction, etc.)

There is no BA curriculum in water resources at DKU.

8. Short description of MA curricula relevant for water resources, non-engineering subjects (economic, financial, institutional, social, political aspects of water resources management)

Educational program “7M04113 Integrated water resources management”

Course of training: 2 years, Full-time study

Training program: 7M041 Business and Administration

Language of instruction: English 70%, Russian 30%

Total number of ECTS credits – 120

Academic degree: Master of Economics "7M04113 - Integrated water resources management"

The program covers interdisciplinary issues in the field of supply, distribution and rational use of water resources in Central Asia. The aim is exchange of advanced international practices to

aid in solving water and environmental problems at all levels.

The program content is developed in collaboration with the Free University of Berlin (Freie Universität Berlin) having many years of experience in education in the field of Water Management including Central Asia.

Courses are conducted by professors from Freie Universität Berlin and experts from German and Central Asian organizations. Students actively participate in research projects and practical activities.

The MA program "7M04113 Integrated Water Resources Management" consists of the following modules:

Module "Pedagogy and psychology of higher education"

Module "Professional English"

Module "Management in water resources"

Module "Theoretical basis of scientific research"

Module "Basis of the IWRM"

Module "Environmental Policy, Legislation & Economy"

Module "Technical aspect of IWRM"

Module "Field research and data analyses"

Module "Scientific research of master student"

9. What is the language of textbooks and other teaching materials used by the university (local language, Russian, English, other)

The main part of textbooks and other teaching materials on the MA program IWRM is in English.

10. Readiness / possibilities to introduce in the present BA and MA curriculum subjects relevant for water governance and of water diplomacy in a step by step manner

Yes, within the framework of the MA program "IWRM", there is a willingness to gradually update existing subjects on water governance and water diplomacy

11. Estimated time and procedure required to accredit new curricula / modules

Accreditation of new curricula / modules in Kazakhstan usually takes from 6 months to 1 year.

You can get acquainted with the rules of accreditation at the link:

<https://adilet.zan.kz/eng/docs/V1600014438>

### **III. Possibilities for augmentation / exchanges - to improve the ability to teach the new curricula**

12. Can your institution hire new staff teaching water governance and/or water diplomacy-related subjects? Will it be able to do that in the coming years?

The "water diplomacy" subject is in the list of the elective component in IWRM. However, due to the limited funding for the teaching staff, the teaching of this subject is not carried out.

13. Is your institution interested in inviting guest lecturers? Which topics/ expertise would be the most interesting? Can you provide stay/ travel expenses/ remuneration, etc.?

Yes, DKU is interested in inviting the guest lecturers. Most of the professors teaching IWRM MA program are the guest lecturers. They teach subjects such as Integrated Water Resources Management, Water and Climate Systems, Hydraulic Engineering, Project Planning, NEXUS, Water Governance and Cooperation, and others. The cost for accommodation, travel,

remuneration and others for the guest lecturers are paid by the DAAD project.

14. Possibilities to invite “practitioners” - government officials, representatives of international and regional organizations, research institutes, etc. - to deliver lectures. Which topics/ expertise would be the most interesting? Can you provide stay/ travel expenses/ remuneration, etc.?

In the frame of the IWRM MA program, government officials, representatives of international and regional organizations, research institutes are invited to give lectures online.

15. Challenges to implement academic (external and internal) mobility in form of joint modules, or whole MA programs

The main challenge to implement the academic mobility is in the lack of the financial support or insufficient funding. There is also a need to have joint academic mobility projects to implement the mobility in form of joint modules, or whole MA programs.

#### **IV. Teaching staff wishing (able) to participate in training, research, regional coordination of curricula and exchanges**

16. List of teaching staff wishing to actively participate in the modernization of existing curricula or development of new curricula (in cooperation with EU universities) - preferably with relatively good English proficiency

**Larissa Kogutenko**, PhD, Integrated Water Resources Management Master Program Coordinator, UNESCO Chair Holder in Water Management in Central Asia at DKU, [l.kogutenko@dku.kz](mailto:l.kogutenko@dku.kz)

**Viktorya Krylova**, PhD, Project Coordinator at the Center for Natural Resources and Sustainability, DKU, [krylova@dku.kz](mailto:krylova@dku.kz)

**Yuliya Borissova**, PhD, Project Coordinator at the Center for Natural Resources and Sustainability, DKU, [borissova@dku.kz](mailto:borissova@dku.kz)

17. List of teaching staff wishing to join courses for continuous training or research projects related to water governance and/or water diplomacy

**Larissa Kogutenko**, PhD, Integrated Water Resources Management Master Program Coordinator, UNESCO Chair Holder in Water Management in Central Asia at DKU, [l.kogutenko@dku.kz](mailto:l.kogutenko@dku.kz)

**Viktorya Krylova**, PhD, Project Coordinator at the Center for Natural Resources and Sustainability, DKU, [krylova@dku.kz](mailto:krylova@dku.kz)

**Yuliya Borissova**, PhD, Project Coordinator at the Center for Natural Resources and Sustainability, DKU, [borissova@dku.kz](mailto:borissova@dku.kz)

18. List of teaching staff wishing to participate in courses to strengthen English language proficiency.

There is no need for the teaching staff of IWRM MA program to strengthen English language, because IWRM master's program is taught in English.

19. Readiness / possibilities to work with representatives of universities from other Central Asian countries to develop harmonized modules (especially on water diplomacy) that can be taught at several universities of the region.

Yes, the team of the Center for Natural Resources and Sustainable Development, DKU is ready to participate in the development of water diplomacy harmonized modules.