

Summer School in frame of the LIFE LOGOS 4 WATERS project ANNOUNCEMENT 2024

- <u>Organiser:</u> LUDOVIKA UNIVERSITY OF PUBLIC SERVICE, Faculty of Water Sciences
- Prepared by: Dr. Enikő Anna Tamás, professor

Locations: CAMPUS:

H-6500 Baja, Bajcsy-Zs. u. 12-14.; Google maps link:

 $\frac{https://www.google.hu/maps/place/NKE+EKKL+V\%C3\%ADztudom\%C3\%A1ny}{i+Kar+Kari+K\%C3\%B6nyvt\%C3\%A1r/@46.1806659,18.9353996,337m/data=!3m1!1e3!4m5!3m4!1s0x47431ffafe8a7091:0x66de6ded70bf9ca5!8m2!3d46.1809215!4d18.9390725}$

HYDROMETRY FIELD STATION "Lászlóffy Woldemár"

H-7332 Magyaregregy, Várvölgyi u. Google maps link:

https://www.google.hu/maps/place/E%C3%B6tv%C3%B6s+J%C3%B3zsef+F% C5%91iskola+Hidrometriai+Telepe/@46.2331105,18.3086614,281m/data=!3m 2!1e3!4b1!4m5!3m4!1s0x4742bd20a9760ee9:0xce5a7222ec277805!8m2!3d46. 2331086!4d18.3097753

Changes in locations according to the project progression can be expected but will be announced beforehand.

Apply via the following link until 20 May 2024:

https://forms.gle/C8zxUhAbrybgS4Dx7



















Background

The need for climate and flood risk resiliency has induced changes in water policies in Europe and thus new challenges in water resources management are arising. Integrated approach and basin-scale, cross- border harmonized water management policies must prevail, and in order to achieve the basin-wide goals, attitudes towards floods and droughts have to be changed, as the importance of Nature-based Solutions is quickly emerging.

LIFE LOGOS 4 WATERS project aims to contribute to the achievement of these goals. We created this Summer School in order to meet the recognized need for the improvement of water-related education. Our Faculty strives for the use of state-of-the-art technologies in day-to-day monitoring, and for the widest possible application of novel surveying, evaluation and design techniques.

<u>Topics</u>

The Summer school consists of classroom lectures, field measurements and processing of measurement results, including theory and practice of catchment hydrology processes from small to large scale, for the investigation of runoff from the watershed. Participants will have hands-on field experience in surveying river morphology and discharge as well, in service of the design of Nature-based Solutions.

Instructors

Apart from the teaching staff of the Faculty of Water Sciences, guest lecturers are going to be invited from the General Directorate of Water Management (OVF), from regional Water Authorities and other partner organizations as well as from international institutions.

Participation

Participation is highly recommended for Civil, Environmental and Water Operation engineering students with water-related specializations, but is limited to 20 students at a time.

















Detailed Summer School course outline 2024

Day	Approximate duration	Topics
Day 1	1 h	Introductory lecture on the purpose of the Summer School
okt 13	1 h	Introductory lecture on Nature-based Solutions and their
	1 h	importance Introduction of participants (students and lecturers)
	1 h	Lecture on labour safety and security
	2 h	Theoretical instruction (hydrology)
	2 h	Theoretical instruction (surveying)
Day 2		Theoretical instruction: field measurement techniques in service
al-+ 14		of the design processes of Nature-based Solutions.
okt 14	2 h	Part 1: Hydro-geodesy
	2 h	Part 2: Hydrometry
	2 h	Opening ceremony (lunch)
		Organization of the Hungarian Presidency of the Council of the EU
	afternoon	Travel to the field measurements' location (Magyaregregy)
Day 3	4 h	Equipment introduction, basic practical measurements at the field
okt 15		station (velocity/discharge measurement with different methods,
		measurements of precipitation, infiltration and surface runoff, soil
		moisture determination,
		sediment sampling and analysis)
	4 h	Processing and evaluation techniques of the results of the
		measurements of the day, elaboration of technical descriptions and
<u> </u>		protocols
Day 4	4 h	Measurements for hydrological longitudinal profile of the discharge of a
okt 16		creek, including morphological measurements (Cross-sections) with
		traditional and modern technology, junction measurements (walking
		distance: ~6km), introduction to water-related monitoring techniques
	4 h	Processing and evaluation techniques of the results of the
		measurements of the day, elaboration of technical descriptions and
	-	protocols
Day 5	morning	Travel to the campus in Baja
okt 17	4 h	Measurements with Acoustic Doppler Current Profiler (ADCP), and sonar technology
Day 6	2 h	Finalization of the documentations and technical descriptions
-	6 h	Discussion and presentation of the results, evaluation of the Summer
okt 18		School activities. Official closing.

Contact: Dr.Enikő Anna Tamás (e-mail: tamas.eniko.anna@uni-nke.hu)

Changes in course outline can be expected according to the project progression but will be announced beforehand. The exact programme of the Summer School will be announced in August.













03/04/2024 Baja, Hung<mark>ary</mark>