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**Call for applications: Deadline 21 July 2024**

## **Summer School Innovations for sustainable land use and nature conservation**

9 – 15 September 2024  
Samarkand State University, Samarkand, Uzbekistan

### **Background**

The international, interdisciplinary Summer School „Innovations for sustainable land use and nature conservation in Central Asia“ is hosted by the Institute of Agrobiotechnologies and Food Safety of the Samarkand State University (SamSU) in the framework of the [Regional Programme “Integrative and Climate-sensitive Land Use in Central Asia” \(ILUCA\)](#), implemented by the Deutsche Gesellschaft für Zusammenarbeit (GIZ). It takes place in Samarkand, Uzbekistan, 9-15 September 2024.

Innovative technologies in nature conservation, sustainable land use and food security are becoming increasingly important, but are not yet widely used in Central Asia. However, there is a wide range of possible applications. For example, Geographical Information Systems (GIS) helps users to monitor, visualize, analyze and understand, among others, species populations and distributions, land use and change, agricultural production or progress of natural resources conservation activities.

Against this background, the Summer School will train students and young professionals in nature conservation skills and knowledge, particularly focused on learning about and applying GIS techniques in sustainable land use and nature conservation effectively. The aim is to achieve close practical relevance and exchange with the adjacent cross-border protected areas of the Zarafshan Valley – the Zarafshan National Natural Park (Uzbekistan) and the Zarafshan Zakaznik (Tajikistan).

The Summer School is organized by the Samarkand State University in cooperation with the Michael Succow Foundation and Rostock University (Germany).

The participants will receive a certificate of attendance based on their successful completion of the Summer School.



## Program

The participants will learn about innovative approaches in sustainable land use and nature conservation. They will also gain competency in using GIS software for QGIS. The Summer School will combine theoretical lectures and practical exercises. For the practical exercises in GIS/Remote Sensing, the participants will be introduced to:

### GIS:

- Introduction, Data Acquisition, Coordinate systems and GNSS, Data Editing, Spatial Data Analysis, Services and Open Data, Layouts, Cartography and Map generation
- Hands-on Exercises with QGIS

### Remote Sensing:

- Agrobiodiversity in the context of remote sensing, Resolution and Scale – from spectroscopy to canopy level, Image Classification and land use mapping, Introduction to Machine Learning and Deep Learning, Google Earth Engine, Mapping with Drones
- Hands-on Exercises with Google Earth Engine and QGIS

Furthermore, various meetings with practitioners working in the field are planned to promote further debate and give insights into possible fields of GIS application.

The technical program is supplemented by a cultural part with excursions to Samarkand and its historic town – the UNESCO World Heritage Site „Crossroads of Cultures“.

## Key instructors

Dr.-Ing. Görres Grenzdörffer, Senior Researcher at the Chair for Geodesy and Geoinformatics, Rostock University, Germany

Dr. Toshpulot Rajabov, Director of Institute of Agrobiotechnologies and Food Security

Dr. Natalya Marmazinskaya, Deputy Director of Zarafshan Nature National Park, Uzbekistan

Alexander Steiger, MSc., Research Associate at the Chair for Geodesy and Geoinformatics, Rostock University, Germany

## Target group and requirements

The Summer School is mainly aimed at interested persons from Uzbekistan and Tajikistan, but is also open to participants from all other Central Asian countries.

The Summer School wishes to attract young professionals studying or working in the areas of ecology, agriculture, social sciences, development studies or geography who are interested in nature conservation. The minimum qualification required for the participation is a bachelor degree.

The maximum number of participants for the Summer School is 20.

The knowledge of English or Russian language is a prerequisite to participation.

Participants are recommended to bring their own laptop to the Summer School.

## Application

In order to apply for participation, please send us the following information in English or Russian via E-Mail **until 21 July 2024**:

- A letter of motivation (1-2 pages) stating field of study or work and its relation to the topic of the Summer School, explaining the reasons of interest in participating in the Summer School.
- Curriculum vitae;

Accepted applicants will be informed by **31 July 2024**.

## Fees

No fees are charged for participation in the Summer School. The costs for the participants will be covered by the organizers and include travel costs, accommodation and meals. The travel costs will be reimbursed during the Summer School. The participants will be accommodated on the campus of the Institute of Agrobiotechnologies and Food Safety of Samarkand State University. The accepted participants should organize health insurance on their own.

## Venue

Samarkand State University  
Institute of Agrobiotechnologies and Food Security  
Jomboy district,  
Sh. Burxonov Street, 2A.  
191200, Samarkand, Uzbekistan  
[www.samdu.uz](http://www.samdu.uz)

## Organisational contact and application

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Further information on ILUCA project:  
<https://www.giz.de/en/worldwide/130501.html>