## General information

**Programme Title:**

Agroforestry for Climate Change Adaptation (AFCLIMA)

**Programme Type:**

Erasmus+ Blended Intensive Programme (BIP)

**CODE:**

2025-1-SK01-KA131-HED-000315967-1

**Virtual Component:**

14 September 2026 – 27 September 2026

**Kick-off Meeting of the Virtual Compoment:**

14 September 2026, 10:00 CET (online)

**Physical Mobility Period:**

28 September 2026 – 2 October 2026

**Language:**

English

**ECTS Credits:**

3 ECTS

**Target Group:**

Bachelor's, Master's and PhD. Students and teaching staff interested in agroforestry, climate change adaptation, sustainable land management, biodiversity conservation and environmental planning.

## Objectives of the BIP Programme

The Blended Intensive Programme "**Agroforestry for Climate Change Adaptation – (2025-1-SK01-KA131-HED-000315967-1)**" aims to provide students with interdisciplinary knowledge and practical skills related to climate-resilient land management through agroforestry approaches. The programme addresses current environmental challenges, including climate change, soil degradation, biodiversity loss, and water scarcity, by promoting sustainable landscape management practices.

The main objectives of the programme are:

- To introduce students to the principles and applications of agroforestry systems and their role in climate change adaptation and mitigation.
- To develop an understanding of ecosystem services provided by agroforestry, including soil protection, carbon sequestration, biodiversity enhancement, water regulation, and landscape resilience.
- To familiarize participants with practical measures for soil and water conservation, such as strip cropping, grassed waterways, infiltration strips, windbreaks, shelterbelts, retention reservoirs, and forest hydrological measures.
- To strengthen students' competencies in assessing environmental risks and designing climate-smart land-use solutions using modern tools, including GIS and digital terrain analysis.
- To provide hands-on experience through field visits to agroforestry demonstration sites, where students can observe real-world examples of sustainable farming and landscape management practices.
- To enhance participants' ability to design agroforestry systems adapted to local environmental conditions, considering species selection, biodiversity, ecosystem functionality, and climate resilience.
- To foster international and interdisciplinary collaboration by bringing together students and academic staff from different European higher education institutions and study fields.
- To promote problem-solving, teamwork, communication, and project management skills through collaborative case-study work and the development of practical agroforestry design projects.
- To encourage the exchange of knowledge, experiences, and best practices among participants from different countries and cultural backgrounds.

## Methods and Expected Outcomes

The programme combines innovative teaching and learning methods within a blended learning format, integrating virtual learning activities with an intensive on-site component. The educational approach emphasizes experiential learning, international cooperation, and the practical application of theoretical knowledge.

Teaching and learning methods include:

- Online lectures introducing key concepts of agroforestry, climate adaptation, sustainable landscapes, biodiversity management, and ecosystem services.
- Interactive seminars and discussions encouraging critical thinking and exchange of perspectives among participants from different countries and disciplines.
- GIS-based practical exercises focused on identifying erosion-prone areas, interpreting digital terrain models, and assessing landscape vulnerability.
- Field visits to agroforestry demonstration sites and climate adaptation projects, allowing participants to observe practical implementation of sustainable land management measures.
- Hands-on activities, including agroforestry establishment and tree-planting demonstrations, providing direct experience with implementation techniques and maintenance requirements.
- Collaborative project-based learning in international student teams working on real-world case studies.
- Consultation sessions with academic experts and practitioners
- Student presentations and peer-learning activities promoting communication skills and intercultural exchange.

**Expected learning outcomes:**

Upon successful completion of the programme, participants will be able to:

- Explain the principles, functions, and benefits of agroforestry systems in the context of climate change adaptation.
- Assess environmental challenges related to soil erosion, water management, biodiversity conservation, and landscape resilience.
- Apply basic GIS tools and spatial data analysis techniques for landscape assessment and planning.
- Design climate-smart agroforestry solutions tailored to specific environmental and socio-economic conditions.
- Evaluate ecosystem services provided by agroforestry systems and their contribution to sustainable development.
- Work effectively in international and interdisciplinary teams.
- Communicate scientific and technical information through oral presentations and written project outputs.
- Demonstrate increased awareness of sustainable land-use practices and their role in addressing climate-related challenges.

The final output of the programme will be a team-based project in which students analyse a selected landscape, identify environmental challenges, and propose a comprehensive agroforestry design including soil and water conservation measures, biodiversity enhancement actions, and expected climate adaptation benefits. The projects will be presented and discussed during the final session of the programme.

## Description of the Virtual Component

The virtual component will be delivered through online learning activities before the physical mobility period. It will begin with a **kick-off online meeting on 14 September 2026 at 10:00 CET (approximately 1 hour)**, during which participants will be introduced to the programme objectives, learning outcomes, schedule, project assignments, and organisational arrangements.

Following the kick-off session, participants will have access to a series of online lectures, and guided self-study materials covering the fundamentals of agroforestry, climate change adaptation, sustainable landscapes, ecosystem services, and biodiversity management. The virtual phase will provide the theoretical foundation necessary for the on-site activities and ensure that all participants possess a common understanding of key concepts before the intensive field-based learning experience.

### Student Group Project: Climate-Smart Agroforestry Design

Throughout the programme, students will work in international and interdisciplinary teams on the development of a climate-smart agroforestry design proposal for a selected study site.

The project will include:

- Site characterization and landscape analysis;
- Identification of environmental challenges (soil erosion, water management issues, biodiversity loss, climate-related risks);
- Assessment of existing land-use practices;
- Proposal of suitable agroforestry measures;
- Design of soil and water conservation interventions;
- Selection of appropriate tree and shrub species;
- Estimation of expected environmental benefits, including climate adaptation, biodiversity enhancement, and ecosystem services.

During field visits, students will collect observations, photographs, GIS information, and practical insights from farmers and experts. These data will be used to prepare a final project report and presentation.

The final project will be presented on the last day of the programme and evaluated by the academic staff.

## Detailed program

**DAY 1: 28.9.2026**

**Soil and Water Conservation in Agricultural Landscapes**

**8:30 – 8:45 Opening and Introduction**

- Welcome and programme overview

**8:45 – 9:45 Strip Cropping as an Erosion Control Measure (lecture)**

- Principles of strip cropping
- Effects on runoff and soil loss
- Examples from Slovak agricultural landscapes
- Analysis of orthophotos and GIS maps

**09:45 – 10:00 Coffee break**

**10:00 – 10:45 Students presentations (15 mins / country)**

Agroforests systems in own countries, erosion control measures on agricultural land

**10:45 – 11:45 Agroforestry Systems for Climate Adaptation (lecture)**

- Types of agroforestry systems
- Ecosystem services
- Examples from Slovakia and Europe

**11:45 – 12:45 Lunch**

**12:45 – 13:45 Forest Hydrological and Soil Conservation Measures (lecture)**

- Small check dams
- Slope stabilization techniques
- Forest water retention measures
- Practical examples and field applications

**13:45 – 14:45 Erosion Measures in Agricultural Land (lecture)**

- Grassed waterways
- Infiltration strips
- Windbreaks
- Shelterbelts and hedgerows
- Small retention reservoirs
- Landscape elements improving resilience

**14:45 – 15:15 Project Introduction and Site Briefing** (students will work on predefined case-study sites introduced on the first day of the programme, field visits and practical activities will provide the information necessary for the development of agroforestry design proposals)

- Task introduction
- Site introduction
- Expectations explanation
- Team formation

**15:15– 15:30 Coffee break**

**15:30 – 18:00 GIS Practical Exercise**

- Identification and mapping of erosion gullies
- Basic GIS analysis using Digital Terrain Models (DTM)
- Hydrological data interpretation

**DAY 2: 29.9.2026**

**Agroforestry Design and Field Experience**

**9:00 – 15:00 Visit to Agroforestry Demonstration Sites (Radošina, Šalgovce)**

- Existing agroforestry systems
- Soil protection measures
- Water management practices
- Discussion with farm managers

**15:00 – 16:00 – Transport to Nitra**

**16:00 – 18:00 Team Work Session I**

- identification of key environmental challenges
- preliminary site assessment
- definition of project objectives

**DAY 3: 30.9.2026**

**Agroforestry Design and Field Experience**

**9:00 – 11:00 Visit to Agroforestry Demonstration Site (Mlyňany 1)**

**11:00 – 12:00 Species Composition and Design of Agroforestry Systems (lecture in the field)**

- Selection of tree species
- Functional diversity
- Landscape integration
- Climate resilience considerations

**12:00 – 13:00 Lunch**

**13:00 – 15:00 Visit to Agroforestry Demonstration Site (Mlyňany 2)**

**15:00 – 16:00 – Transport to Nitra**

**16:00 – 18:00 Team Work Session II**

- GIS analysis
- integration of field observations
- development of agroforestry design concepts

**DAY 4: 1.10. 2026 Day 4**

**Practical Agroforestry Implementation**

**9:00 – 12:00 Field Activity - Tree Planting Demonstration (Bojnice)**

- Site preparation
- Planting techniques
- Species selection
- Maintenance requirements

**12:00 – 13:00 Lunch**

**13:00 – 15:00 – Transport to Nitra**

**15:00 – 18:00 Team Work Session III**

- Final design development
- Site assessment
- Proposed agroforestry design
- Preparation of maps and diagrams
- Soil and water conservation measures

- Biodiversity enhancement measures
- Consultation with lecturers
- Preparation of presentations

**DAY 5: 2.10.2026**

**Student Presentations and Programme Wrap-Up**

**8:30 – 9:15 Knowledge Synthesis**

- Agroforestry systems
- Climate adaptation strategies
- Soil and water conservation
- Landscape resilience

**9:15 – 12:00 Final Project Preparation**

**12:00 – 13:00 Lunch**

**13:00 – 15:00 Student Presentations**

- Landscape analysis
- Identified environmental problems
- Proposed agroforestry solution
- Expected climate adaptation benefits

**15:00 – 16:00 Discussion and Evaluation, Closing Ceremony**

- Certificates
- Programme evaluation
- Final remarks

## Practical information

Participants are responsible for arranging and covering their own accommodation costs. We recommend booking accommodation well in advance. The following options are in Nitra and offer convenient access to the university and city centre:

- **Penzión PKO Nitra - http://www.pkonitra.sk/**
  J. Kráľa 4, 949 01 Nitra, Slovakia
- **ZÁMOCKÁ KORUNA u Hoffera - https://www.penzion-hoffer.sk/18687/ubytovanie**
  Svätoplukova 2, 949 01 Nitra, Slovakia
- **Penzión Toscana - https://www.pizzeriatoscana.sk/en/**
  Dolnozoborská 70, 949 01 Nitra, Slovakia

Participants are also welcome to use other accommodation providers according to their preferences and budget.

### Meals

Participants are responsible for covering their own meal expenses.

- **Breakfasts** – arranged and paid individually by participants.
- **Lunches** – will be pre-ordered by the organisers to facilitate the programme schedule. The cost is approximately **EUR 10 per lunch** and will be paid directly by participants.
- **Dinners** – arranged and paid individually by participants.

The organisers will provide:

- Daily **coffee breaks** during the academic programme.
- One **joint social dinner** for all participants during the mobility period.

### Transportation

The organisers will provide:

- Local **bus transportation for all organised field visits and study excursions** included in the programme.

Participants are responsible for:

- Travel to and from Nitra.
- Transportation between the airport and Nitra.
- Any local transportation outside the official programme activities.

Participants are advised to arrange their travel to Slovakia and onward transport to Nitra independently before the start of the programme.

## Venue and Location

Institute of Landscape Engineering
Hospodárska 7, 94976 Nitra, Slovakia

## Contact

Slovak University of Agriculture in Nitra, Faculty of Horticulture and Landscape Engineering, Institute of Landscape Engineering
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## Registration: Application deadline: 31.7.2026

https://docs.google.com/forms/d/e/1FAIpQLSf1f9Fwv0-ctpWaQygttalD8vDUa1azYNfTL-QFxDg4jVnslw/viewform?usp=header