

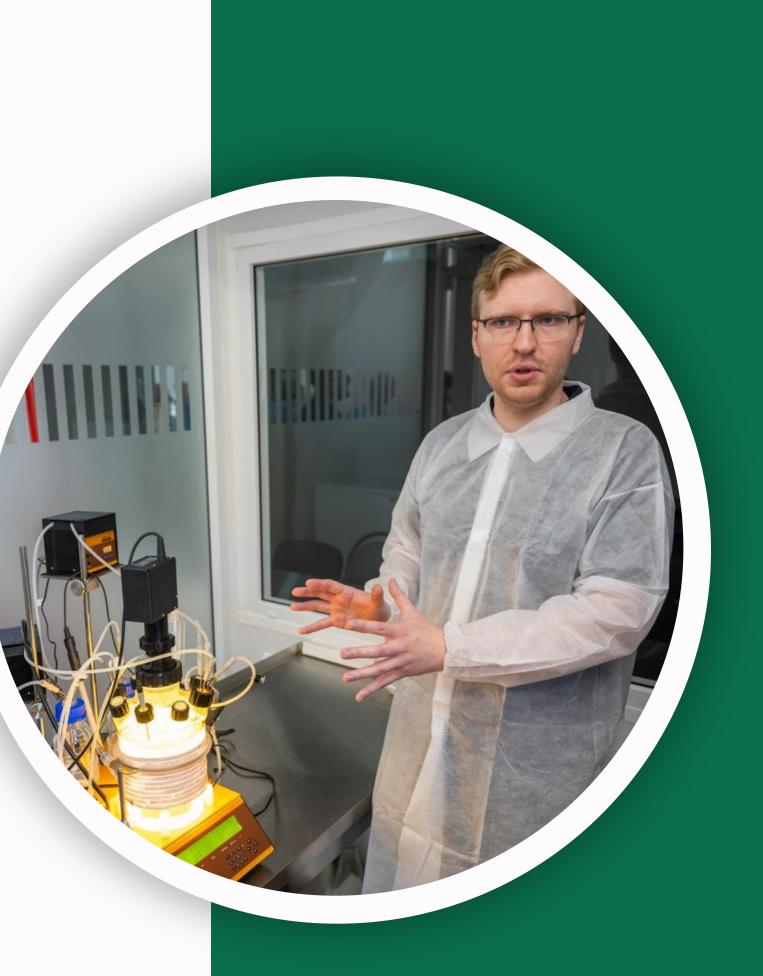




Teaching methods to address the strategic challenges facing the future of agriculture:

## Experience of Vytautas Magnus University Agriculture Academy

Prof. Dr. Astrida Miceikiene, Chancellor of Agriculture Academy



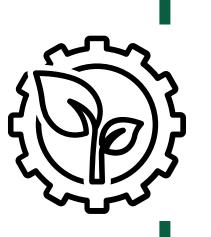


#### **Students from schools**

- Smart students academy.
- Engineering school classes for students.
- STEAM center.

#### Students

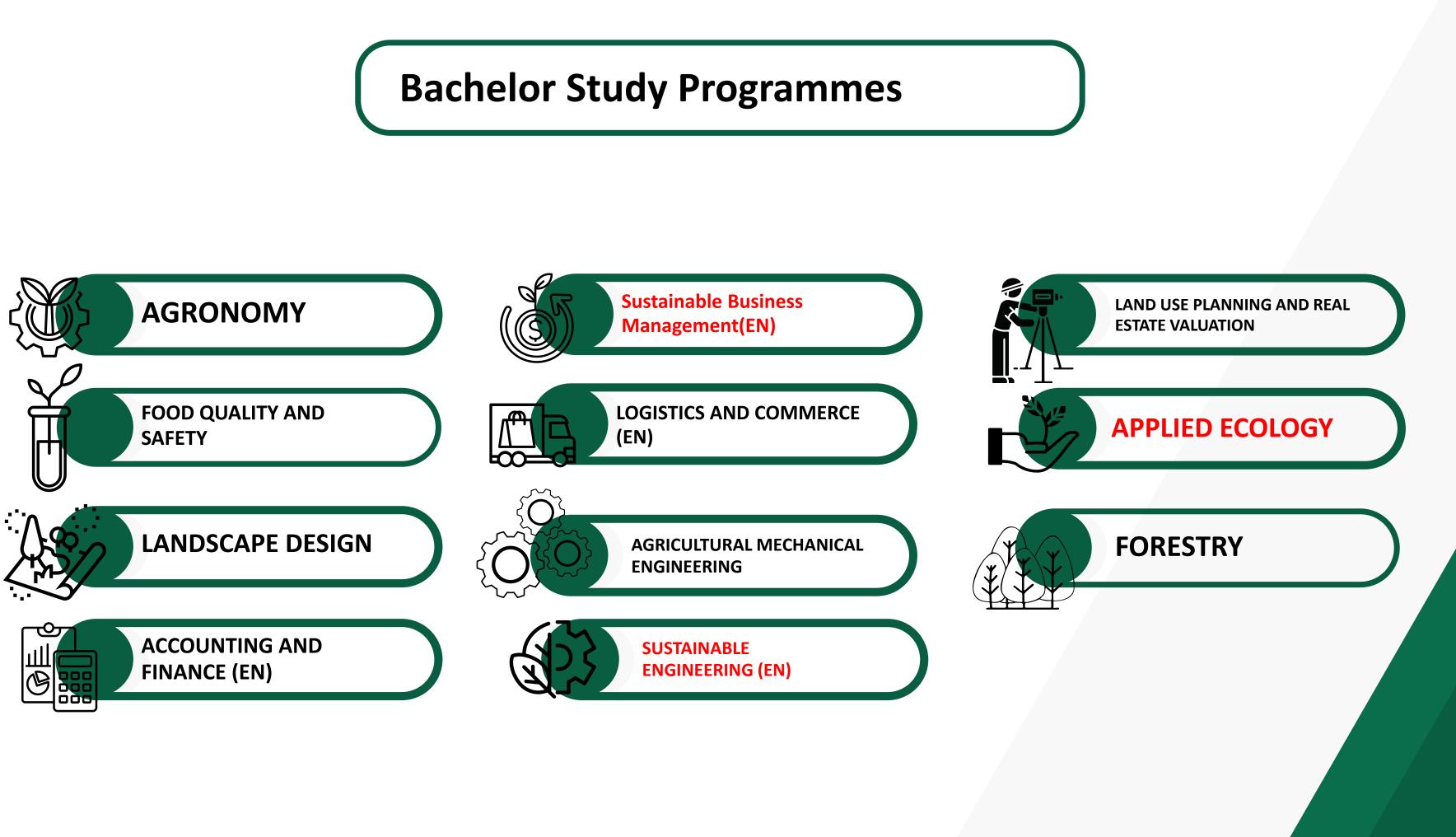
- Training workshops in farmers' farms and companies
- Solving real business problems at the VMU Practice Centre
- Field demonstration in VMU AA training farm/experimental station/farmers farms.
- Research in labs
- Research practices

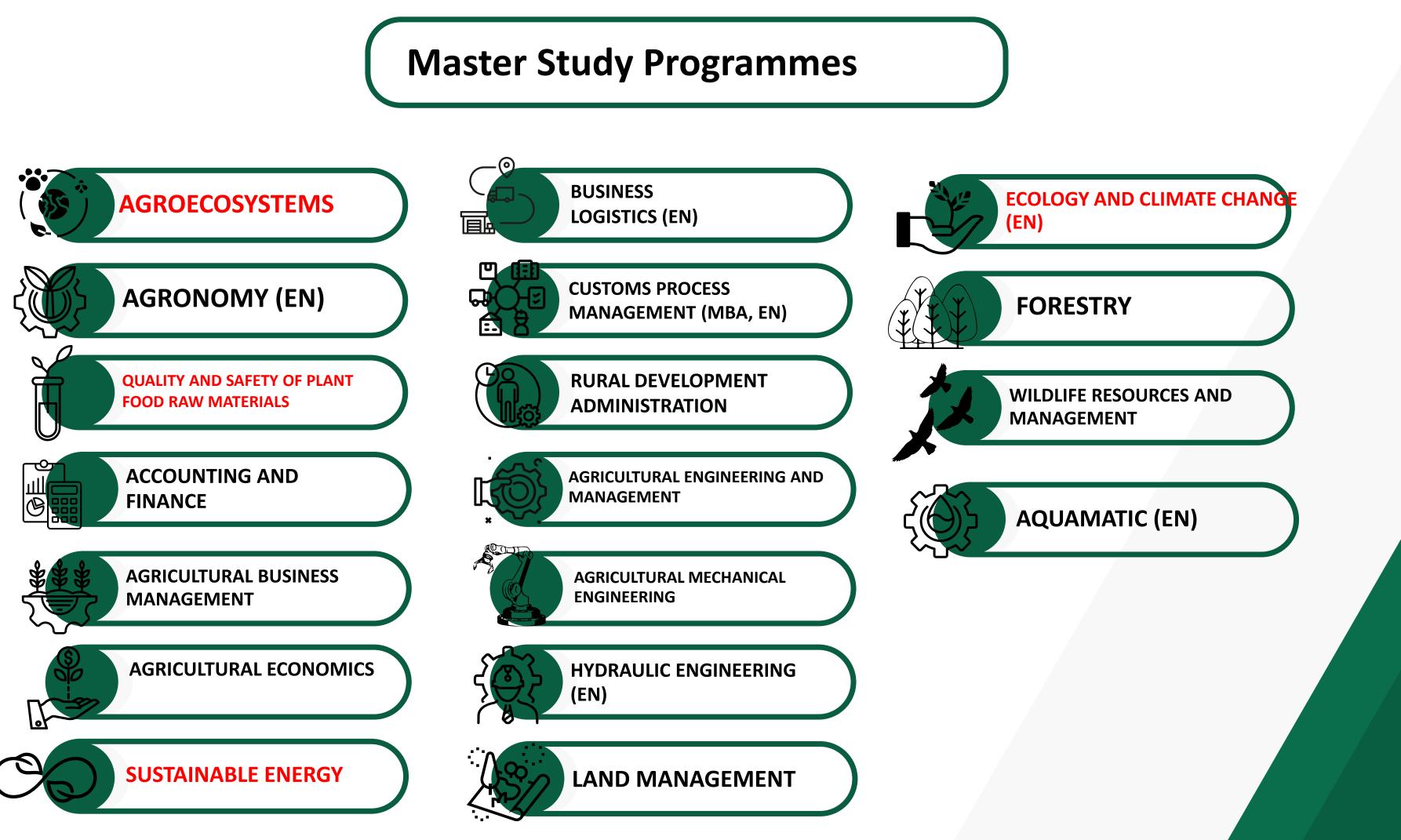


# Business managers and professionals, farmers

- Training and workshops for managers and specialists of agricultural companies and farms
- Training and workshops for farmers
- Consultancy
- Field demonstrations







## Technology-Driven Training (Precision Agriculture)

**Focus:** Train students and farmers to use digital tools, sensors, and data analytics.

**Tools:** GPS-guided tractors, drones, soil sensors, and satellite imagery.

**Impact:** Enhances crop management by optimizing resource use (water, fertilizers), increasing yields, and reducing waste.

**Example: Training workshops** on how to use precision agriculture apps and equipment.



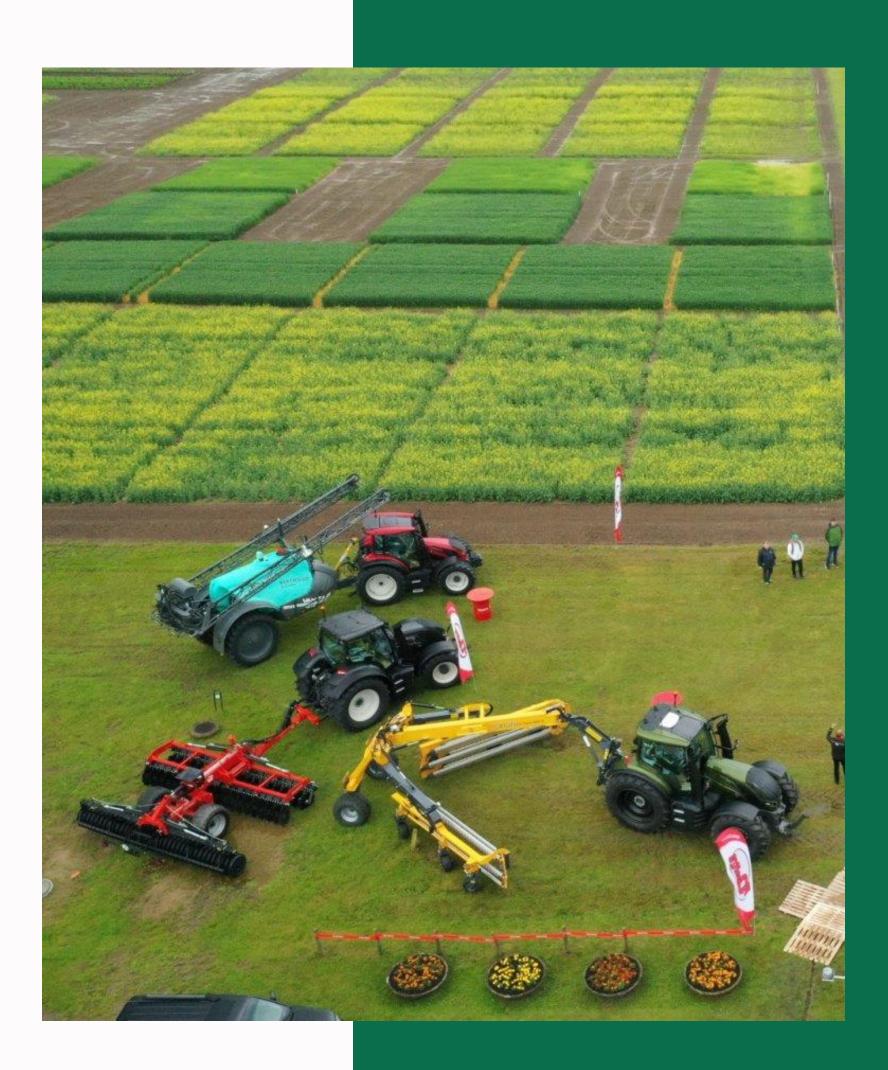
### Sustainable and Regenerative Farming Practices

**Focus:** Train students on eco-friendly agricultural practices.

**Techniques:** Crop rotation, reduced tillage, permaculture, agroforestry, organic farming.

**Impact:** Reduces environmental damage, improves soil health, and promotes biodiversity.

**Example: Field demonstrations** on composting, cover crops, and integrated pest management.



#### **Climate-Resilient Agriculture Training**

**Focus:** Teach students how to adapt to changing climate conditions.

**Topics:** Drought-resistant crops, water-saving techniques, and climate forecasting tools.

**Impact:** Increases resilience to extreme weather and helps maintain productivity under variable climate conditions.

**Example: Workshops** on selecting heat-tolerant crop varieties or improving irrigation systems.



#### **Digital Literacy and Smart Farming**

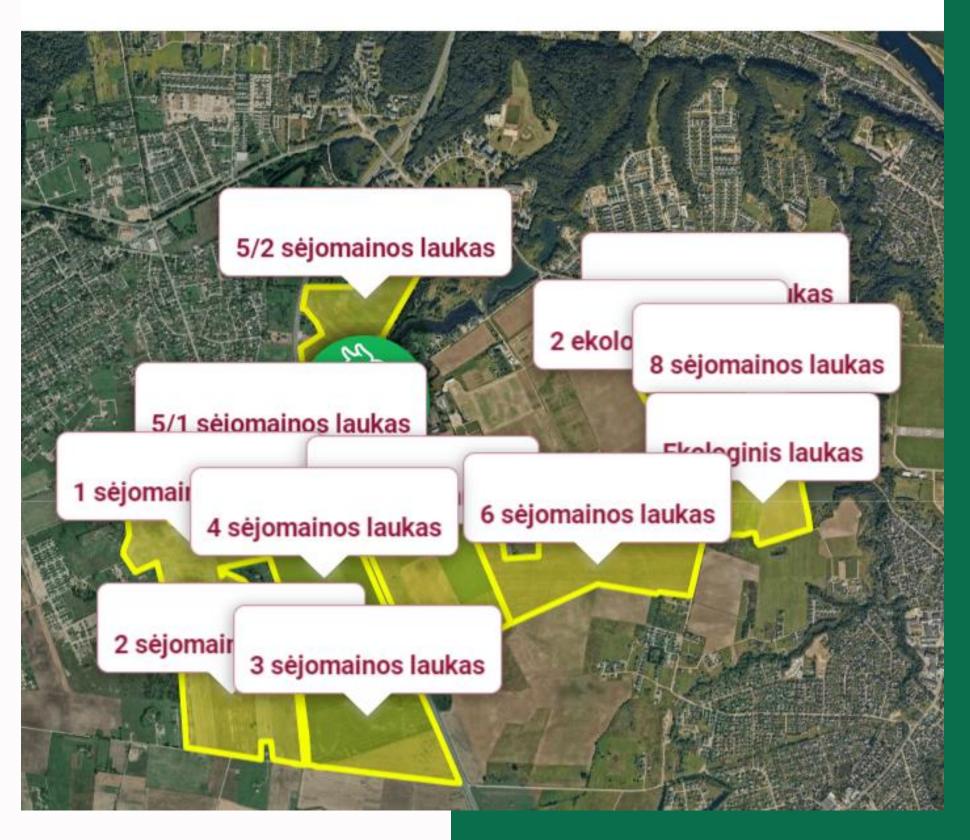
**Focus:** Build business managers, students, and farmers' capacity to use mobile apps, software, and digital platforms.

**Tools:** Market pricing apps, weather forecasting apps, farm management software.

**Impact:** Improved decision-making through real-time data, market access, and financial management.

**Example: Interactive map of VMU AA training farm**. Training to use digital marketplaces and e-extension services.

#### SVEIKI ATVYKĘ Į INTERAKTYVŲ ŽEMĖLAPĮ



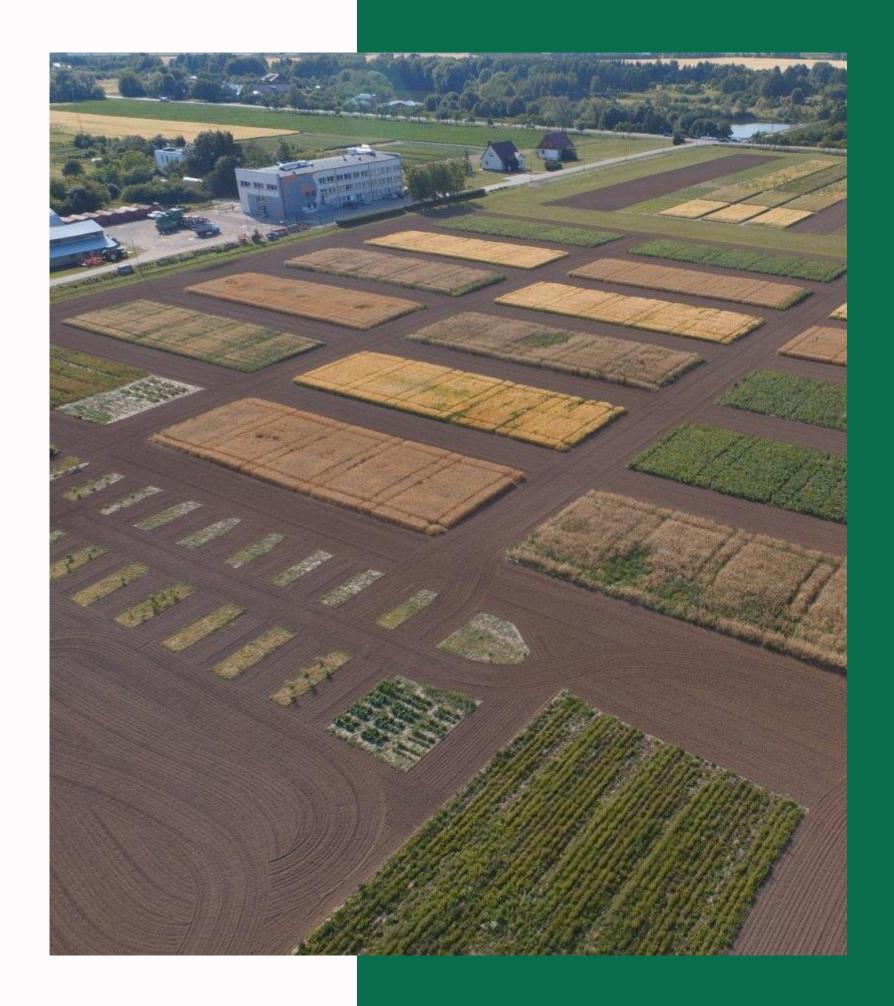
### Participatory and Peer Learning Programs

**Focus:** Encourage knowledge exchange between farmers, students, and local communities.

**Methods:** Farmers and students Field Schools (FFS), farmer-tofarmer knowledge sharing, and community-based participatory approaches.

**Impact:** Builds local capacity, improves adaptability to local challenges, and encourages innovation.

**Example: On-farm demonstration** of new agricultural technology techniques, such as drip irrigation or organic pest control.



#### Agroecology and Biodiversity Training

**Focus:** Promote diversity in cropping systems to maintain ecosystem balance.

**Topics:** Polyculture, natural pest control, conservation of indigenous crop varieties.

**Impact:** Enhances ecosystem services, improves farm resilience, and reduces dependency on chemical inputs.

**Example: Field schools** that focus on integrated crop and livestock systems.



Digital book where students build businesses using only artificial intelligence tools



## Dirbtinio intelekto technologijos verslo kūrime

Sukūrė Vytauto Didžiojo universiteto lektorės dr. Aistė Ragauskaitė ir Gabrielė Viduolytė





SVIETIMO. MOKSLO IR SPORTO



Europos Sajunga





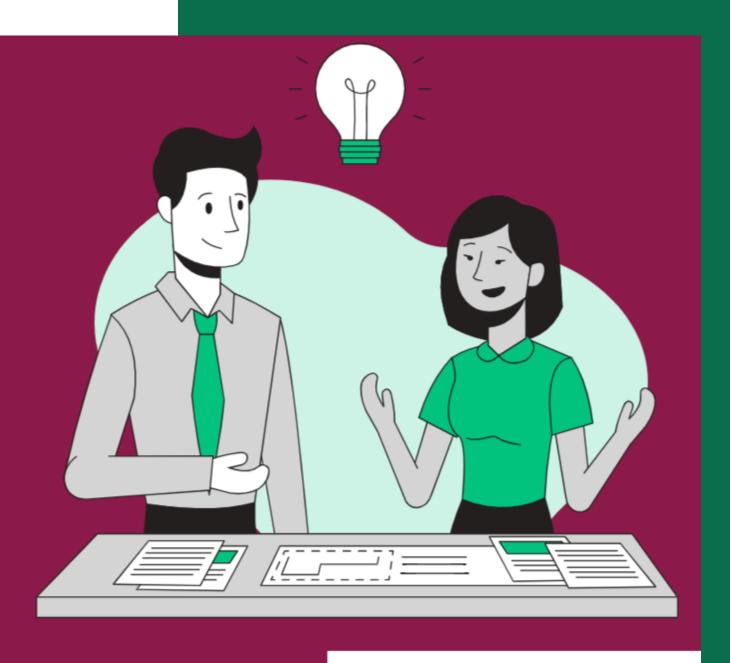
NIVERSITETAS

# Playful methods (Escape rooms etc.)

#### Mokymosi visą gyvenimą praktika studentams

Užduotį parengė: Vytauto Didžiojo universiteto dėstytoja dr. Aistė Ragauskaitė





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veikla vykdoma įgyvendinant projektą "Skaitmeninė švietimo transformacija ("EdT





Fina Euro Next





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# THANK YOU For Your Attention

#### VMU Agriculture Academy

