Master of Science
in Digitalization and Automatization in Agriculture
STUDY PROGRAM CURRICULUM

Curriculum overview

Year I, Semester 1 – 30 ECTS

- Sensor Systems and IoT for Digital Agriculture
- Digital Platforms in Agriculture
- Elective Course
- Elective Course
- Digital Laboratory I: Sensors and Data Integration

Year I, Semester 2 – 30 ECTS

- Scientific Research Methods and Applied Statistics
- Agricultural Data Science: Data Analysis and Management
- Sustainable Energy Systems
- Elective Course
- Elective Course

Year II, Semester 1 – 30 ECTS

- Artificial Intelligence and Machine Learning for Agriculture
- Agricultural Robotics and Autonomous Systems
- Remote Sensing and GIS for Agricultural Monitoring
- Digital Laboratory II: Drones and Imagery for Monitoring
- Elective Course

Year II, Semester 2 – 30 ECTS

- Master's Thesis Seminar
- Master's Thesis Defence

The programme has a total of 120 ECTS, lasts 2 academic years and is organized into 4 semesters, with full-time study mode and Albanian and English as languages of instruction.

Specialization profiles

The programme is not presented as a formally divided programme with separate profiles; however, it allows specialization through elective courses and the Master's thesis.

Group A – Specialization according to the Master's thesis and AgTech innovation

Includes modules such as Project Management and Innovation in AgTech, Independent Project: Development of Prototypes in AI and Automation, Controlled-Environment Agriculture, Economics of Sustainable Food Systems and Strategic Models in Agribusiness.

Group B – Recommended for students from non-IT backgrounds

Includes Advanced Programming, Automation, Digital Agriculture and Database Design and Administration.

Group C – Recommended for students from non-agricultural backgrounds

Includes Advanced Technologies in Field Crop Production, Horticulture and Plant Protection, Livestock Production, Agricultural Mechanization Technologies and Soil and Water Resource Management for Precision Agriculture.

Basic data

Element	Description
Study programme code	
Duration	4 semesters – 120 ECTS
Study mode	Full-time
Language of instruction	Albanian and English
Final degree	Master of Science in Digitalization and Automation in Agriculture
Profiles	No formal profiles; specialization is achieved through elective courses and the Master's thesis
Maximum number of students	32
Minimum number for opening the programme	10
Annual tuition fee	ALL 68,000 for first degree; ALL 86,000 for second degree
Admission criteria	Bachelor/DNP degree, 4–4.5-year old-system degree, First-Level Master or Professional Master in relevant fields; selection is based on merit, relevance/compatibility coefficient and approved quotas.
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