

# MAPIoT Summer School

MODERNIZING AGRICULTURAL PRACTICE USING INTERNET OF THINGS  
Grant 20-COP-0019 ESAYEP

## MAPIoT project objectives:

The main goal of this project is to build the capacities and to facilitate the deployment of digital technologies in agriculture. More precisely is based on transferring digital skills, knowledge and technologies from Computer Science domain toward Agriculture, Food Processes and Safety improving efficiency, increasing the wellbeing of the society and reducing the environmental footprint. By exploiting the potential of digital technologies (IoT systems, robotics, automation, software applications) will accelerate the agriculture modernization and will improve the Food Processes like:

- Improving crop yields by modernizing the irrigation practices, optimizing crop management in terms of fertilization and mechanization using mobile technologies, etc.
- Modeling and automated management of food industry processes.
- Sustainability energy availability by new and automated methods for food process monitoring and control.

## We are inviting...

Summer school in the field of development and application of digital technology in agriculture. Seven training courses will be organized on the following areas of interest:

- IoT sensors and actuators, communications and cloud integration;
- Using drones and Computer Vision concepts for image gathering and analysis;
- Digital design of food manufacturing processes;
- Modeling an assembly line for picking fruits / vegetables;
- Algorithms specific to Artificial Intelligence and Evolutionary Computing used in agriculture and in the modeling and automatic management of the fermentation process of white wines;
- **HACKATHON:** Develop your own business idea in agriculture and food industry.

## WHEN and WHERE?

**16 July 2023 – 29 July 2023**, Faculty of Engineering, Sibiu organized by "Lucian Blaga" University of Sibiu, Romania

## Why to apply:

- Acquiring technical skills related to Internet of Things, Artificial Intelligence, Robotics and smart drones and their application in agriculture and food safety processes;
- Acquiring 5 ECTS transferable credits;
- Have fun and work together with students from Norway.

## Requirements:

- Student Application Form - can be downloaded from the project site <http://digifof.omilab.ulbsibiu.ro/psm/content/ss2/info>
- Curriculum Vitae in Europass format;
- Motivation letter in English language;
- Academic Transcript to certify the student's status and the average grade for the previous semester or the previous year of study;
- English Proficiency Certificate or a recommendation from an English teacher;

## Timeline for the selection:

- **12 April 2023 - 03 May 2023**  
Fill out the required papers and submit them to the Secretariat of the Faculty of Engineering
- **5 May 2023**  
Selection interview (room IM311- Faculty of Engineering);
- **8 May 2023**  
Results announcement;
- **9 May 2023**  
Submission of appeals to the Secretariat of the Faculty of Engineering;
- **11 May 2023**  
Final results .

## Students selection:

### Eligibility criteria:

Students must be enrolled at the "Lucian Blaga" University of Sibiu in Bachelor study cycle or Master study cycle, to have passed all the exams in the previous year (semester), to have good academic results and use the English language at least at level B2.

### Selection criteria:

- Academic results - 20%
- Motivation letter - 20%
- Interview to confirm the content of the motivation letter and to assess attitude towards participation in the Summer School - 40%
- Language skills - 20%

### Number of students accepted for the project:

- 5 students from the Faculty of Agricultural Sciences, Food Industry and Environmental Protection (all specializations);
- 5 students from the Faculty of Engineering (Computer Science domain).

Working together for a **green,**  
**competitive** and **inclusive Europe**

### More details:

- MAPIoT project site <http://digifof.omilab.ulbsibiu.ro/psm/content/ss2/info>
- Project Manager, Prof. Eng. Adrian Florea, PhD, [adrian.florea@ulbsibiu.ro](mailto:adrian.florea@ulbsibiu.ro)