

## Workshop on drone technology & Doctoral Day

April 29th, 2025

## Artificial Intelligence and Autonomous Things Laboratory

University Of Larbi Ben M'hidi - Oum El Bouaghi - Algeria

TUnmanned Aerial Vehicles (UAVs), commonly known as drones, have revolutionized multiple industries by enabling advanced capabilities in aerial surveillance, delivery services, agriculture, disaster management, filmmaking, and defense. The *"Workshop on Drone Technology: Innovation in the Skies"* offers an in-depth exploration of the fundamentals, applications, and future potential of drone systems.

This workshop is designed to provide participants with both theoretical knowledge and hands-on experience in drone technology. Key topics include drone anatomy, flight principles, sensor integration, navigation and control systems, communication protocols, and safety regulations. Participants will also explore recent innovations such as autonomous flight, computer vision integration, real-time data analytics, and AIdriven object tracking.

Interactive sessions will guide attendees through the design and assembly of basic drone models, as well as flight simulations and real-time piloting using flight controllers. Emphasis will also be placed on regulatory frameworks, ethical considerations, and the growing need for secure and responsible drone operations, especially in populated and sensitive areas.

Open to students, researchers, hobbyists, and professionals, the workshop aims to ignite curiosity and foster skills necessary for contributing to the rapidly growing drone ecosystem. Guest lectures by experts from academia and industry will highlight cutting-edge applications and career opportunities in drone technology.

By the end of the workshop, participants will be equipped with the foundational tools to innovate, design, and responsibly operate drones across various domains, positioning themselves at the forefront of one of today's most exciting technological frontiers.

The day includes a workshop on the proposed theme and presentations on the progress of the thesis projects.



Steering Committee

Pr. Derdour Makhlouf- University of Oum el Bouaghi, Algeria Dr. Nassima Mellal - University of Oum el Bouaghi, Algeria Dr. Dehimi Nour-Elhouda- University of Oum el Bouaghi, Algeria

## Organizing committee

Pr. Zakaria Laboudi - University of Oum el Bouaghi, Algeria Dr. Boussaha Karima - University of Oum el Bouaghi, Algeria Dr. Berkane Mohamed - University of Oum el Bouaghi, Algeria Dr. Chibani Meriem - University of Oum el Bouaghi, Algeria Dr. Hamza Lamia - University of Oum el Bouaghi, Algeria Dr. Zakaria Tolba - University of Oum el Bouaghi, Algeria



Organized By :





Doctoral Day Program

Tuesday, April 29, 2025

08:30 - 09:00: Welcome and opening

09:00 – 12:00: Workshop and practical work in drone technology

12:00 – 13:00: Lunch break

13:00 - 16:00:

## presentation and evaluation of the progress reports of doctoral students - Promotion of 2022

16:00 - 16:30: Closing of the Day and Debate