



# INFORMATION TECHNOLOGIES APPLIED IN AVIATION

Master programme, taught in English  
2 semesters, 120 ECTS

25 students without tuition fee  
2 full scholarships for African students

## CAREER PROSPECTS

The master will ensure knowledge and skills for challenging current and new jobs, such as: Chief IoT, Data architect, Cybersecurity engineer, Environmental Analyst, Virtualisation engineer, Developer, Responsible with digital data, Data Scientist, Airport UX Designer, Growth Hacker, Mechatronic Engineer.

**Professional partners:** *Menzies Aviation, Cluj Airport, Blue Air, Safety Investigation and Analysis Authority, Iași Airport, Romanian Airports Association, Croatia Airlines.*  
*International aviation partner organizations: ACI, ICAO*

This master programme strongly focuses on digitalization of air transport, ensuring cross-disciplinary skills in aviation and ICT and a holistic understanding of ICT options and methods applied in aviation. Students will acquire learning outcomes for developing, analyzing and managing innovative and advanced ICT systems for air transport industry.

**Academic partners:** *University of Zagreb, Instituto Superior Técnico Lisbon, University of Strasbourg, University of Zilina, École Nationale Supérieure des Mines d'Albi-Carmaux.*





# YEAR 1

## SEMESTER I

- Air Transport Economics
- Strategic Management in Aviation
- Student Research

### A. STUDENTS WITH A BACKGROUND IN IT

- Aerodynamics and Flight Mechanics
- Airline Operations
- Airport Management and Infrastructure
- Air Traffic Management

### B. STUDENTS WITH A BACKGROUND IN AERONAUTICS

- Software Engineering
- System Engineering Development
- Data center architecture
- Smart Data Processing

## SEMESTER II

- Aviation Operations Optimization Methods
- Modeling Theory And Tools in Aeronautical Industry
- Specific Platforms and Tools for Aeronautical Industry
- ATM Information Network Management
- Aviation Safety Management
  - A. Airworthiness
  - B. Intelligent Interfaces

# YEAR 2

## SEMESTER III

- Data & Decision Support Management
- CAD/CAM Methodology
- Computer Vision
- Unmanned Air Vehicles and their IT Needs
- Cybersecurity Systems Management in Aviation Reliability of Hardware and Software in Aviation

## SEMESTER IV

- Ethics
- Student Research

Master Directors  
**SORIN EUGEN ZAHARIA**  
**ADINA PAVEL**

## CONTACT US

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