MASTER PROGRAMME

Information Technologies Applied in Aviation

United Nations Educational, Scientific and Cultural Organization

UNESCO Chair on Engineering for Society, University Politehnica of Bucharest, Romania

WHY THIS MASTER?

The master will ensure knowledge and skills for challenging current and new jobs, such as: Chief Data Officer (CDO), Air Transport Data Architect, Big Data Architect, Cybersecurity Engineer, Virtualization Engineer, Data Protection Officer, Auditor, Responsible with Digital Data, Data Scientist, Airport UI & UX Designer, Growth Hacker, Mechatronic Engineer, Aviation Software Developer.

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

Academic partners: *University of Zagreb, Instituto Superior Técnico Lisbon, University of Strasbourg, University of Zilina.*

Professional partners: *Menzies Aviation, Blue Air, Safety Investigation and Analysis Authority, Bucharest Airports, Romanian Airports Association, Croatia Airlines.*

International aviation partner organizations: *ICAO, ACI*

APPLICATIONS SUBMISSION

Deadline: **29th of October 2021**

ENTRY REQUIERMENTS

Applicants must hold a Bachelor's degree.

The admission requirements for Romanian students are described at: https://upb.ro/admitere/

The admission requirements for foreign students are described at: http://international.upb.ro/

Language: English
Duration: 2 years (4 semesters)
ECTS: 120

Number of available spots
25 without tuition fee
20 with tuition fee

200 ani aniversare 1818

UNIVERSITATEA POLITEHNICA DIN BUCUREȘTI

Year 1

FIRST SEMESTER

- Air Transport Economics
- Strategic Management in Aviation
- Aviation 4.0
- Student Research

A. STUDENTS WITH A BACKGROUND IN IT

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

B. STUDENTS WITH A BACKGROUND IN

AERONAUTICS

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

SECOND SEMESTER

- Aviation Operations Optimization Methods
- Project Management
- Specific Platforms and Tools for Aviation
- ATM Information Networks
- Aviation Safety Management

A. Airworthiness
B. Intelligent Interfaces

Year 2

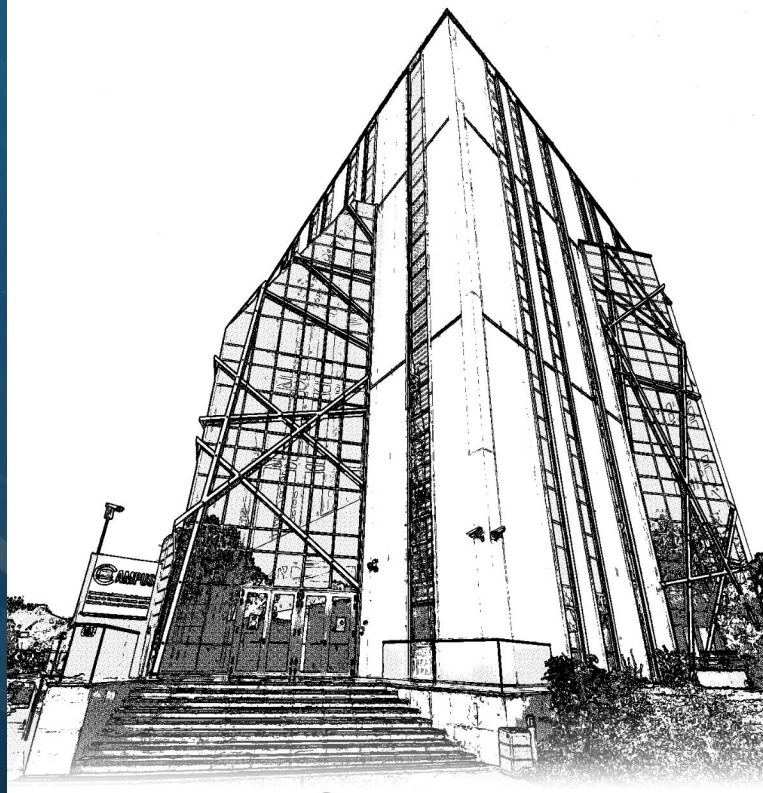
THIRD SEMESTER

- 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

FOURTH SEMESTER

- Scientific research and dissertation development
- Ethics

**Students will choose from the first year one of the two packages of optional courses.*



Contact

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