



AERIAL AUTONOMOUS SYSTEMS

HELLENIC REPUBLIC

Interdepartmental Postgraduate Thessaloniki
«Aerial Autonomous Systems»



ARISTOTLE
UNIVERSITY
THESSALONIKI

Participating Schools:

- Electrical and Computer Engineering (Host School)
- Mechanical Engineering
- Rural and Surveying Engineering

Informations: uav@ece.auth.gr

Program of Studies Academic Year 2025-26

1st semester (Total ECTS 30)

a/a	Course	Type of course (comp./elec.)	Instructors	ECTS
1	Sensor systems for autonomous vehicles – UAVs	Y	I. Papaefstathiou, A. Hatzopoulos	5
2	Advanced Aerodynamics	Y	K. Yakinthos, P. Panagiotou S. Kapsalis	5
3	Intelligent Robotic Systems	Y	A. Symeonidis Em. Tsardoulis	5
4	GNSS and Inertial positioning for Autonomous Systems	Y	Ch. Pikridas, S. Bitharis, G. Foundas	5
5	Dynamics and Control I	Y	P. Seferlis, S. Natsiavas, D. Giagopoulos	5
6	Lightweight materials (incl. composites), specifications and requirements for UAV applications	Y	G. Savvaidis E. Giannakis, C. Gakias	5

2nd semester (TotalECTS 30)				
[All optional / (6) are chosen]				
a/a	Course	Type of course (comp./elec.)	Instructors	ECTS
1	Big data Analysis	E		5
2	Structural design - Hardware system design of UAV's (synthesis, static and quasistatic analyses)	E		5
3	Manufacturing of lightweight systems focusing on UAV applications	E		5
4	Fixed wing UAV layout design and synthesis.	E		5
5	Flight Mechanics and UAV Performance	E		5
6	Unmanned Aerial Vehicles as Mapping Systems	E		5
7	Advanced topics to Wireless Communications	E		5
8	Dynamics and Control II	E		5
9	Advanced RF aspects of UAVs	E		5
10	Airworthiness	E		5
3rd semester (Total ECTS 30)				
a/a	Course	Type of Thesis	Teaching hours	ECTS
	Μεταπτυχιακή Διπλωματική Εργασία	Υ		30