



IDENTIFYING DATA

(*)Traballo fin de máster

Subject	(*)Traballo fin de máster			
Code	O07M189V01208			
Study programme	Máster Universitario en Sistemas Aéreos no Tripulados			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	9	Mandatory	1st	2nd
Teaching language	#EnglishFriendly Spanish			
Department				
Coordinator	González Jorge, Higinio			
Lecturers	González Jorge, Higinio			
E-mail	higiniog@uvigo.es			
Web	http://www.galiciadrones.es/			
General description	Subject that allows the development of an engineering project in the drone sector.			

Skills

Code	
A1	Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context
A2	That students know how to apply their acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.
A3	That students are able to integrate knowledge and face the complexity of making judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments.
A4	That students know how to communicate their conclusions -and the ultimate knowledge and reasons that support them- to specialized and non-specialized audiences in a clear and unambiguous manner.
A5	That students possess the learning skills that will enable them to continue studying in a manner that will be largely self-directed or autonomous.
B1	That students acquire general knowledge in unmanned aerial systems engineering.
B2	That students acquire general knowledge in the operation of unmanned aerial systems.
B3	That students acquire the ability to analyze the needs of a company in the field of unmanned aerial systems and determine the best technological solution for it.
B4	That students acquire the knowledge to develop unmanned aerial systems and plan specific operations, depending on the existing needs and apply the existing technological tools.
B5	That students are able to apply, in the field of unmanned aerial systems, the principles and methodologies of research such as literature searches, data collection, data analysis and interpretation, as well as the presentation of conclusions, in a clear, concise and rigorous manner.
C1	Knowledge about the main systems, on-board instruments and control station of an unmanned aircraft, as well as their influence on safety.
C2	Knowledge of geomatics, photogrammetric and cartographic principles, navigation, aerotriangulation, interpretation and digital image processing necessary in the operation of unmanned aerial systems and know how to apply the regulations in force.
C3	Ability to interact with other technical teams in the engineering field for the planning of operations with unmanned aerial systems.
C4	Ability to develop a technical project in the field of unmanned aerial systems engineering.
C5	Ability to apply data from unmanned aerial systems to obtain key information for natural resource and agroforestry management.
C6	Knowledge of existing good practices in the operation of unmanned aerial systems for use in the field of engineering, architecture and territory.

- D1 Ability to understand the meaning and application of the gender perspective in the different fields of knowledge and in professional practice with the aim of achieving a more just and egalitarian society.
- D2 Ability to communicate orally and in writing in Galician.
- D3 Sustainability and environmental commitment. Equitable, responsible and efficient use of resources.
- D4 Development of innovative and entrepreneurial spirit.
- D5 Interpersonal relationship skills.
- D6 Ability to work as part of a team.
- D7 Organizational and planning skills.
- D8 Capacity for analysis and synthesis.
- D9 Critical thinking skills and creativity.
- D10 Focus on quality and continuous improvement.

Learning outcomes

Expected results from this subject	Training and Learning Results
To be able to develop a technical project in the field of unmanned aerial systems.	A1 A2 A3 A4 A5 B1 B2 B3 B4 B5 C1 C2 C3 C4 C5 C6 D1 D2 D3 D4 D5 D6 D7 D8 D9 D10

Contents

Topic
Project in the field of unmanned aerial systems.

Planning

	Class hours	Hours outside the classroom	Total hours
Mentored work	0	225	225

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

Description
Mentored work

Personalized assistance

Methodologies	Description
Mentored work	Telematic tutoring

Assessment

Description	Qualification	Training and Learning Results
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Mentored work	Master thesis defense	100	A1	B1	C1	D1
			A2	B2	C2	D2
			A3	B3	C3	D3
			A4	B4	C4	D4
			A5	B5	C5	D5
					C6	D6
						D7
						D8
						D9
						D10

Other comments on the Evaluation

Sources of information

Basic Bibliography

Complementary Bibliography

Recommendations

Subjects that it is recommended to have taken before

Aerodynamics, flight mechanics and propulsion/O07M189V01103

Fundamentals of unmanned aircraft systems/O07M189V01101

Data analysis methods/O07M189V01201

Observation systems/O07M189V01104