



## IDENTIFYING DATA

### Final Dissertation

|                     |   |           |      |            |
|---------------------|---|-----------|------|------------|
| Subject             | Final Dissertation  |           |      |            |
| Code                | O07M174V01206   |           |      |            |
| Study programme     | Máster Universitario en Operaciones e Ingeniería de Sistemas Aéreos no Tripulados   |           |      |            |
| Descriptors         | ECTS Credits  | Choose    | Year | Quadmester |
|                     | 9   | Mandatory | 1st  | 2nd        |
| Teaching language   | Spanish<br>Galician<br>English  |           |      |            |
| Department          |   |           |      |            |
| Coordinator         |   |           |      |            |
| Lecturers           |   |           |      |            |
| E-mail              |   |           |      |            |
| Web                 | <a href="http://aero.uvigo.es">http://aero.uvigo.es</a>   |           |      |            |
| General description | The student will carry out an engineering project in the field of unmanned aircraft systems in which he/she will put into practice the knowledge acquired throughout the master.<br>International students may request from the teachers: a) materials and bibliographic references in English, b) tutoring sessions in English, c) exams and assessments in English. |           |      |            |

## Training and Learning Results

|      |   |
|------|---|
| 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 the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study  |
| A3   | That the students be able to integrate knowledge and face the complexity of formulating judgments from information, which being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments                 |
| A4   | That the students know how to communicate their conclusions - and the latest knowledge and reasons that support them - to specialized and non-specialized audiences in a clear and unambiguous manner   |
| A5   | That students have the learning abilities that allow them to continue studying in a way that will have to be largely self-directed and autonomous   |
| B1   | That students acquire general knowledge in unmanned aircraft systems engineering  |
| B2   | That students acquire generic knowledge in unmanned aircraft systems operations   |
| B3   | That students acquire the capabilities to analyze the needs of a company in the field of unmanned aerial systems and determine the best technological solution for the same   |
| B4   | That the students acquire the knowledge to develop unmanned aerial systems or to plan specific operations, depending on the existing needs and to apply the existing technological tools  |
| B5   | That students know and be able to apply the principles and methodologies of research, such as bibliographical searches, data collection and analysis and interpretation thereof, as well as the presentation of conclusions, in a clear, concise and rigorous way                             |
| C1   | Knowledge of the main systems, the on board instruments and the control station of a non-manned aircraft, as well as its influence on security  |
| C2   | Knowledge of the geomatic, photogrammetrical and cartographic principles of navigation, aerotriangulation, interpretation and digital processing of images, as well as the good practices existing in the operation of unmanned aerial systems and know how to apply the regulations in force |
| C3   | Capacity of interacting with technical teams in planning with unmanned aerial systems   |
| C4   | Capacity to develop a technical project in the field of engineering and operations with unmanned aerial systems   |
| D1   | Capacity to understand the meaning and application of the gender perspective in the different fields of knowledge and 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 the innovative and entrepreneurial spirit   |
| D5  | Ability to interpersonal relationships   |
| D6  | Ability to work as a team  |
| D7  | Capacity for organization and planning   |
| D8  | Ability of analysis and synthesis  |
| D9  | Capacity for critical reasoning and creativity   |
| D10 | Guidance to quality and continuous improvement   |

### Expected results from this subject

| Expected results from this subject   | Training and Learning Results   |
|--|---|
| Be able to develop a technical project in the field of operation with unmanned aircraft systems. | A1<br>A2<br>A3<br>A4<br>A5<br>B1<br>B2<br>B3<br>B4<br>B5<br>C1<br>C2<br>C3<br>C4<br>D1<br>D2<br>D3<br>D4<br>D5<br>D6<br>D7<br>D8<br>D9<br>D10 |

### Contents

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| Topic  |
| Project in the field of unmanned aircraft systems engineering. |
| Project in the field of unmanned aircraft systems operations.  |

### Planning

|               | Class hours | Hours outside the classroom | Total hours |
|---------------|-------------|-----------------------------|-------------|
| Mentored work | 0           | 215                         | 215         |
| Essay         | 1           | 9                           | 10          |

\*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 | Face-to-face tutoring and email attention |

### Assessment

| Description | Qualification | Training and Learning Results |
|-------------|---------------|-------------------------------|
|-------------|---------------|-------------------------------|

|               |                    |     |    |    |    |     |
|---------------|--------------------|-----|----|----|----|-----|
| Mentored work | Project report.    | 100 | A1 | B1 | C1 | D1  |
|               | Oral presentation. |     | A2 | B2 | C2 | D2  |
|               |                    |     | A3 | B3 | C3 | D3  |
|               |                    |     | A4 | B4 | C4 | D4  |
|               |                    |     | A5 | B5 |    | D5  |
|               |                    |     |    |    |    | D6  |
|               |                    |     |    |    |    | D7  |
|               |                    |     |    |    |    | D8  |
|               |                    |     |    |    |    | D9  |
|               |                    |     |    |    |    | D10 |

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#### Other comments on the Evaluation

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#### Sources of information

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#### Basic Bibliography

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#### Complementary Bibliography

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#### Recommendations

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#### Subjects that are recommended to be taken simultaneously

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External internships/O07M174V01205

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