



## IDENTIFYING DATA

### Master Thesis

Subject	Master Thesis			
Code	V04M192V01402			
Study programme	Máster Universitario en Ingeniería Biomédica			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	24	Mandatory	2nd	2nd
Teaching language				
Department				

Coordinator	Izquierdo Belmonte, Pablo Eguizábal Gándara, Luis Eduardo Pardo Froján, Juan Enrique Comesaña Piñeiro, Rafael
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General description	Master Thesis (TFM) in Companies, Hospitals and Research Centers of the biomedical field

## Training and Learning Results

Code	
A1	Knowledge and understanding that provide a basis or opportunity for originality in developing and / or applying ideas, often in a research context.
A2	That the students can apply their knowledge and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.
A3	That students are able to integrate knowledge and handle complexity and formulate judgments based on information that was incomplete or limited, include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments.
A4	Students can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously.
B1	Ability to design, develop, implement, manage and improve products and processes in the different areas of the biomedical engineering, by means of appropriate analytical, computational or experimental techniques.
B2	Ability to direct activities related to the CG1 competence
B4	Ability to solve problems with initiative, decision making, creativity, critical reasoning and to communicate and transmit knowledge, abilities and skills in the field of biomedical engineering.
B9	Ability to organize and plan within the sphere of a company, and other institutions and organizations.
B11	To recognize ethical and professional responsibilities in biomedical engineering situations and to make informed judgements, which must consider the impact of biomedical engineering solutions in global, economic, environmental and social contexts.
B12	To operate effectively in a multidisciplinary team whose members, together, exercise leadership, create a collaborative and inclusive environment, set goals, plan tasks and meet goals.
C14	Ability to apply biomedical engineering design to produce solutions that meet specific needs taking into account the public health, safety and welfare, as well as global, cultural, social, environmental and economic factors

- 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 equal society.
- D2 Ability to communicate orally and in writing in the Galician language.
- D3 Sustainability and environmental commitment. Equitable, responsible and efficient use of resources.

### Expected results from this subject

Expected results from this subject	Training and Learning Results
Research, classification and structuring of information on any topic inside the biomedical engineering field.	A1 B2 B9 B11
Preparation of a memory in which they collect , among others, the following appearances: antecedents, problematic or state of the art, aims, phases of the project, development of the project, conclusions and future lines.	A3 A4 B2 B9 D2
Design of equipment, prototypes, programs of simulation, etc, according to specifications.	A2 B1 B2 B4 B9 B11 B12 C14 D1 D2 D3

### Contents

Topic

### Planning

	Class hours	Hours outside the classroom	Total hours
Mentored work	600	0	600

\*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	Research, ordination and structuring of information on any thematic inside the biomedical engineering field. Preparation of a report in which they collect , among others, the following appearances: antecedents, problematic or state of the art, aims, phases of the project, development of the project, conclusions and future lines. Design of teams, prototypes, programs of simulation, etc, according to specifications. Classical projects of engineering technical Studies, organisational and economic theoretical Works-experimental

### Personalized assistance

#### Methodologies Description

Mentored work	The tutor in the centre and the academic tutor will attend personally the doubts and queries so much of theoretical character like practical.
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### Assessment

Description	Qualification	Training and Learning Results
Mentored workThe student will have to make a Master's Thesis report (project) and a public presentation of the same (presentation).	100	A1 B1 C14 D1 A2 B2 D2 A3 B4 D3 A4 B9 B11 B12

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**Other comments on the Evaluation**

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Students must be enrolled in all the program subjects necessary for the acquisition of the title

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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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