Universida_{de}Vigo

IDENTIFYING DATA
Master Thesis

Subject	Master Thesis			
Code	V05M145V01401			
Study programme	Telecommunication Engineering			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	30	Mandatory	2nd	2nd
Teaching language	Spanish English			
Department				
Coordinator	Fernández Veiga, Manuel			
Lecturers	Fernández Veiga, Manuel			
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Web	http://faiticuvigo.es			
General description	The Master Thesis (TFM) forms part, like module, of the plan of studies of the title of Master in Engineering of Telecommunication. It is an original and personal work that each student realises of autonomous form under educational permission, and has to allow him show of form integrated the acquisition of the formative contents and the competitions associated to the title. His definition and contents are explained of form more extensive in the rule for the realisation of the TFM, whose content can consult in the web of the School of Telecommunication Engineering.			

Competencies

Code	
A1	CB1 Knowledge and understanding needed to provide a basis or opportunity for being original in developing and/or applying ideas, often within a research context.
B1	CG1 Ability to project, calculate and design products, processes and facilities in telecommunication engineering areas.
B5	CG5 Capacity for development, strategic planning, direction, coordination and technical and financial management of projects in all fields of Telecommunication Engineering following quality and environmental criteria.
B8	CG8 Ability to apply acquired knowledge and to solve problems in new or unfamiliar environments within broader and multidiscipline contexts, being able to integrate knowledge.
B11	CG11 Ability to communicate (oral and written) conclusions, and the knowledge and reasons supporting them, to specialists and non-specialists in a clear and unambiguous way.
B12	CG12 Skills for lifelong, self-directed and autonomous learning.
C17	CE17/TFM Embodiment, presentation and defense, once all credits of the curriculum are passed, of an original exercise performed individually in front of a university jury, consisting of a comprehensive project of Telecommunication Engineering with professional nature, in which skills acquired in the teachings are synthesized.

Learning outcomes

Expected results from this subject	Training and Learning Results
Research, classification and structuring of information on some topic relevant to Telecommunications engineering.	A1 B8 B12
Dissertation containing the fundamentals, the solution and an analysis of results about the problem addressed. It should include a review of the state of the art, an explanation of the methodology or approach, and a discussion of results.	B1 B8 B11 C17
Design of prototypes, computer programs, circuits, procedures, algorithms, designs, methods, etc, complying to specifications	A1 B1 B5 B8 B12

Contents

Topic

The contents of the Master's Thesis are established in the individual proposals offered by the advisors, according to the rules issued by the Academic Commission of the Master Programme, which is published in the website of the School of Telecommunications Engineering	The subject of each work is specific, given the individual character of the work.

Planning

	Class hours	Hours outside the classroom	Total hours
Previous studies	0	60	60
Case studies	0	20	20
Others	10	0	10
Project based learning	0	630	630
Problem solving	0	30	30

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

Methodologies

	Description
Previous studies	Research, reading and work of documentation, proposals of resolution of problems and/or exercises that will realise in the classroom or the laboratory of autonomous form by the students.
Case studies	It carries out a critical analysis of similar problems to the posed in the thesis, with the goal of extracting ideas, analogies, methods or partial results that help in the resolution of the problem posed in the thesis.
Others	The student receives personalised attention of his advisor about the general approach, the definition of aims and the plan of development of his/her thesis, as well as orientation more specific and guidance about the particular technical problems that involves.
Project based learning	The student, individually, solves a scientific problem, originally and independently, within the thematic area of his/her interest, and is able to write a dissertation with the hypotheses, the solution and the conclusions of his work.
Problem solving	The student analyzes the possible solutions to a scientific problem proposed for the thesis, and elaborates a synthesis solution (analytical, meteorological, experimental or combined) that allow him to fulfill the stated goals.

Personalized attention

Methodologies	Description
Others	Each student will gather regulate and periodically with his tutor or tutor to receive academic help on the realisation of his specific work.
Project based learning	Each student will meet his/her advisors to receive guidance, orientation or academic assistance on the objectives, the methodology, the analysis of results and the presentation of the thesis.

Assessment

	Description	Qualification	Training and Learning Results		
Project based learning	The assessment is done after an oral presentation and defence in front of an examining committee. In the evaluation, the Committee might take into account the opinions or the report issued by the advisor, as well as questions like the quality of the presentation, the review of the state of the art, the quality of the technical proposal, the novelty and importance of the results, the capacity of initiative of the student, etc. System of qualifications: it will express by means of numerical final qualification of 0 to 10 according to the valid legislation.	100	A1	B1 B5 B8 B11 B12	C17

Other comments on the Evaluation

All the information related with the Master's Thesis can be accessed on the web of the School of Engineering of Telecommunication. Students and professors can also see individual information about the Master's Thesis in their online administrative office.

Sources of information

Basic Bibliography

Complementary Bibliography

Recommendations