

## TRAINING COMPLEMENT DESCRIPTION

### TRAINING COMPLEMENT DATA INFORMATION

<b>Título</b>	Preliminary Research Project
<b>Planificación temporal</b>	Annual
<b>Créditos ECTS</b>	12
<b>Lengua</b>	English

### Instructors

<b>Name</b>	Andrés Ramos Galán
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### CONTENTS

<b>Chapter 1. Basic Tools</b>
1. Bibliographic Search
2. Reference Management Systems
<b>Chapter 2. Research Dissemination</b>
1. Presentation of the Preliminary Research Project

### COMPETENCES

#### General competences

1. To know how to apply and integrate knowledge, its understanding, its scientific basis, and problem-solving capabilities in new and loosely defined environments, including multidisciplinary contexts, both for research and highly-specialized professions.
2. To know how to convey the results as well as the supporting foundations from scientific and technical research or advanced innovation in a clear way to specialized people.
3. To have developed enough autonomy to participate in research projects and scientific and technical collaborations in the research domain in multidisciplinary frameworks with a high component of knowledge transfer.
4. Being able of assuming responsibilities of his/her own career and specialization in one or several study fields.

#### Specific competences

1. Apply the competences achieved in the master to a research topic, with objectives identified by the student. Summarize and present the results obtained by the usual dissemination means in the research topic.

## Learning Outcomes

At the end of the course the student must have the following competences:

- Deeply knowledge of a research topic.
- Identification of where is the knowledge frontier.
- Knowing the necessary tools for researching in a specific research topic.
- Contribute to the topic.
- Knowing how to present the research results in a scientific journal paper.
- Knowing how to defend the research results in a public presentation.

## TEACHING METHODOLOGY

### General methodological aspects

This subject is a supervised research project and each student has a Director of this research project.

The master thesis Director will have periodical meetings with the student and will guide his/her research work. Besides, he/she will facilitate the information and previous developments for the student to start his/her activity.

The personal work of the student is fundamental and involves the following activities:

### In-class activities

- **Monitoring sessions (4 h):** allow sharing experiences among the students and monitoring done by the subject Coordinator.
- **Supervision of the research project (30 h):** periodical meetings with the project Director and discussion of the results.

### Out-of-class activities

- Doing the research (360 h): it may require the development of simulation tools or experimental prototypes.
- Critical reflection about the obtained results (146 h)

## ASSESSMENT AND GRADING CRITERIA

Assessment activities	Grading Criteria	Weight
Quality of the document	<ul style="list-style-type: none"> <li>• Suitability of the references (journals, conferences, etc.)</li> <li>• Update of the references and strongly related with the topic</li> <li>• Quality and clarity of the critical analysis</li> <li>• Formal quality of the document (organization, notation, figures, etc.)</li> <li>• Language correctness</li> </ul>	90%
Definition of the thesis objectives	<ul style="list-style-type: none"> <li>• Objectives coherent with the state of the art</li> <li>• Viability and organization of the work plan presented</li> </ul>	10%

	• Language correctness	
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## BIBLIOGRAPHY

- V.O.K. Li *Hints on Writing Technical Papers and Making Presentations* IEEE Transactions on Education 42(2), 134-137, May 1999 10.1109/13.762947
- T. Hengl, M. Gould, J. Vranjković *The unofficial guide for authors (or how to produce research articles worth citing)* 2006 ISBN 9279017039
- IEEE *Preparation of Papers for IEEE TRANSACTIONS and JOURNALS* April 2013 ([https://www.ieee.org/documents/transactions\\_journals.pdf](https://www.ieee.org/documents/transactions_journals.pdf))