

Master's Thesis

Academic Year: (2023 / 2024)

Review date: 19-06-2023

Department assigned to the subject: Signal and Communications Theory Department

Coordinating teacher: MARTÍNEZ OLMOS, PABLO

Type: Master Final Project ECTS Credits : 6.0

Year : 1 Semester : 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Completing previous courses is not required for this course

OBJECTIVES

Basic skills

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.

That students know how to apply the knowledge acquired and their ability to solve problems in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.

That students are able to integrate knowledge and face the complexity of formulating 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.

That students know how to communicate their conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way.

That students have the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

General skills:

Ability to collect and analyze existing knowledge in the different areas of AI, autonomously, and the ability to make a proposal for possible solutions to the problems posed.

Capacity for public communication of concepts, developments and scientific-technical results obtained by applying techniques related to AI activities, adapted to the profile of the audience, in a clear and unambiguous way.

Ability to apply the acquired knowledge and solve problems in new or little-known environments within broader and multidisciplinary contexts of AI, with the ability to integrate knowledge.

Ability to know how to communicate (orally and in writing) the progress of work and studies related to AI, the results obtained and conclusions, also assessing the impact achieved by AI techniques in the business, social and economic areas.

Specific skills:

Ability to easily prepare, present and publicly defend before a university court, a project in the scientific or technological field of the subjects of the program, in which the skills acquired in the teachings are synthesized and integrated

DESCRIPTION OF CONTENTS: PROGRAMME

The Master's Thesis is organized around the treatment of a practical case of implementing a system based on Artificial Intelligence.

Students are presented with possible areas in which to carry out such work and guidance and monitoring of this will be provided.

Among the tasks it includes are:

- Presentation of work topics
- Compilation and analysis of information related to the Master's Thesis
- Development of the Master's Thesis
- Preparation of the Report and Defense of the Master's Thesis

LEARNING ACTIVITIES AND METHODOLOGY

- Tutorials
- Individual student work
- Presentation of the report and defense

ASSESSMENT SYSTEM

The evaluation of the TFM aims to measure the knowledge and general skills of the degree acquired by the student through the completion of individual work, public presentation and defense before an academic tribunal.

The presentation and defense of the TFM by the student will weigh 100% and will be carried out by a court that will assess both the work prepared by the student and its presentation on the day of the defense, taking into account specific criteria to evaluate both aspects. Thus, for the work the following aspects will be evaluated, with the following scale:

- presentation and description of the problem (20%)
- tools used (10%)
- description of the work developed (10%)
- exhibition of work and development time (10%)
- knowledge shown by the student (10%)
- ability to present the topic, content, results and conclusions (10%)
- answers given to the questions asked by the members of the court (10%)

In addition, the court may have to take into account the report presented by the student's tutor in its evaluation:

- personal work of the student and report of the tutor: 20%