

# PROGRAMME INFORMATION



## **UNIVERSITY MASTER'S DEGREE IN ARTIFICIAL INTELLIGENCE RESEARCH**

CÓDIGO 310801

**UNED**

ETS de  
Ingeniería  
Informática

## University Master's Degree in Artificial Intelligence Research

### INFORMATION IDENTIFYING THE QUALIFICATION

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#### Name and status of awarding institution

Universidad Nacional de Educación a Distancia.

Public university.

#### Name of qualification and title conferred in original language

Máster Universitario en Investigación en Inteligencia Artificial por la Universidad Nacional de Educación a Distancia.

#### Status

National validity.

Approved by Accord of the Council of Ministers on July 1st, 2011.

#### Main field(s) of study for the qualification

The study is included in the field of Engineering and Architecture.

#### Language(s) of instruction/examination

The degree is taught in Spanish.

### INFORMATION ON THE LEVEL OF THE QUALIFICATION

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#### Level of qualification

Level 3 (Master) in the Spanish Framework of Higher Education (MECES) is equivalent to level 7 of European Qualification Framework (EQF).

#### Official length of programme

The official length of programme is 60 ECTS and 1 year full time.

#### Access requirements

Bachelor's Degree or Engineering.

## INFORMATION ON THE CONTENTS

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### Mode of study

e-learning full time.

### Programme requirements

The programme of studies is composed of 30 selective ECTS and 30 Master's Dissertation ECTS

### Subjects

- Methodology of research on Intelligent Systems
- Artificial Intelligence applications for human and sustainable development
- Evolutionary Computation
- Text Information Discovery
- Learning environments and modeling based on standards
- Adaptive Interfaces
- Machine Learning methods
- Bioinspired Neural Methods
- Probabilistic Methods
- Symbolic methods
- Data Mining
- Natural Language Processing
- Perceptual and Autonomous Robotics
- Artificial Vision
- Adaptive Educational Systems
- Semantic Web and Linked data
- Master's Project in Research in Artificial Intelligence

### Grading scheme

In the Spanish university system, modules/courses are graded on a scale of 0 to 10 points with the following qualitative equivalence:

0-4.9: "suspenso"; 5-6.9: "aprobado"; 7-8.9: "notable"; 9-10: "sobresaliente". A special mention, "Matrícula de Honor" may be granted to up to 5% of the students in a subject provided they have got a "sobresaliente". To pass each subject it is necessary to get at least 5 points.

## INFORMATION ON THE FUNCTION OF THE QUALIFICATION

### Access to further study

This qualification gives access to Doctoral studies, provided that the student has completed a minimum of 300 ECTS in the overall teachings of Bachelor and Master.

### Stated objectives associated with the qualification and professional status (if applicable)

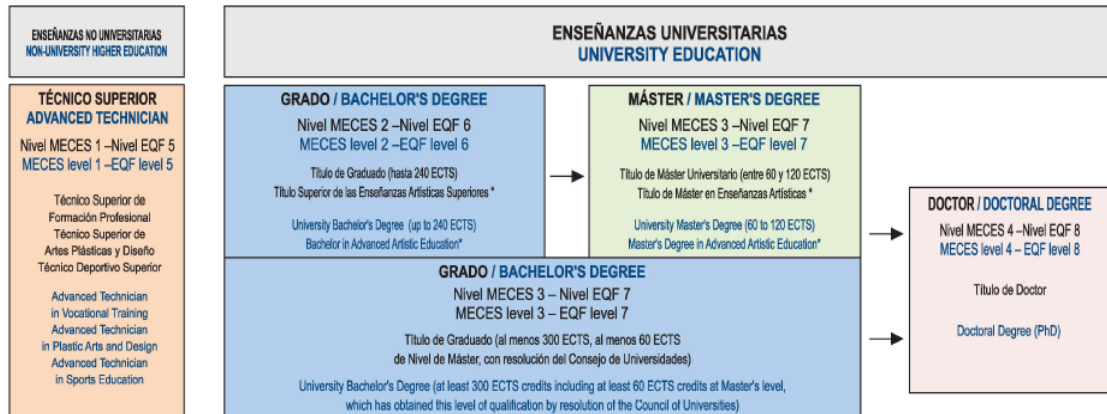
The main goal of the master is to link the basic knowledge of Artificial Intelligence (AI) acquired during the grade studies with the present-day frontiers of research in the field of AI. The master covers in a modular way various sub-areas of AI, among others: symbolic and bio-inspired methods, probabilistic reasoning, connectionism, hybrid methodologies, machine learning, artificial vision and robotics. It has to be highlighted that this is a research Master, with a Master's Thesis of 27 ECTS and a specific compulsory subject of 3 ECTS on research methodology.

Upon completion of the master's studies, the student must know: 1) The foundations of AI and the current frontiers in research, 2) A set of methods and techniques, both symbolic as well as connectionist and probabilistic, to solve AI problems, 3) The specific procedures for applying these methods to a relevant set of domains (education, medicine, engineering, security and surveillance systems, etc.), 4) The degree of relevance of the different AI techniques for a given problem and the methodology of the field, and 5) The fundamentals of the research tasks: bibliographic compilation, description of a research context, writing scientific texts, design of a project and public defense of a research work.

## ADDITIONAL INFORMATION

<https://www.uned.es>

## INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM



\* Las enseñanzas Artísticas Superiores son Enseñanzas no Universitarias dentro del Sistema Educativo español de Enseñanza Superior  
 \* Advanced Artistic Education is non-university education within the Spanish Higher Education System