

## WHY STUDY THIS MASTER AT UAM?

- This Master provides training to highly qualified researchers in audio-visual Deep Learning, becoming a unique offer in the context of the European Union.
- The Master thesis degree can be carried out as an internship in leading institutions across Spain and the European Union by taking advantage of existing collaboration agreements with the UAM.
- The teaching staff of the Master is composed by outstanding experts and professionals, recognized both nationally and internationally.
- The UAM is a modern and multi-cultural university, interested in the complete education of its students and internationally famous, being among the 200 best universities in the world and the 3rd in Spain (ranking QS 2019).
- The UAM is located in Madrid's "scientific hub", an area in northern Madrid hosting many research institutions, university hospitals and innovative companies. The UAM is also part of the International Campus of Excellence UAM+CSIC.
- The UAM is a public university committed to a just and generous world. It supports socially responsible research, the strengthening of ethical values in science, the advancement of open science, and increased awareness of science in society.

# UAM

## Universidad Autónoma de Madrid

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[www.uam.es/posgrado](http://www.uam.es/posgrado)

excelencia Campus Internacional UAM  
CSIC+

UAM Universidad Autónoma  
de Madrid

Engineering and architecture

M

## Master's Degree in DEEP LEARNING FOR AUDIO AND VIDEO SIGNAL PROCESSING

UAM Universidad Autónoma  
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## OVERVIEW

**Degree:** Master's Degree in Deep Learning for Audio and Video Signal Processing

**Academic discipline:** Engineering and architecture

**Number of ECTS credits:** 60

**Public fees:** The minimum set by the Community of Madrid <sup>1</sup>

**Character:** Research-oriented.

**Modality:** Classroom teaching

**Language of instruction:** English

**Place:** Escuela Politécnica Superior (High Polytechnical School)

**Web of the Master:** <http://www.eps.uam.es/mudl4avs>

**Contact:** [master.dl4avs@uam.es](mailto:master.dl4avs@uam.es)

### Number of ECTS by type of subject:

Type of subject	ECTS
Compulsory	48
Optional	0
Internships	0
Master Thesis	12
Total	60

<sup>1</sup>Updated information at [www.uam.es](http://www.uam.es)



## AUDIENCIA

Engineers or candidates in possession of a bachelor's degree in Engineering Areas related to ICT (Information and Communication Technologies).

## DESCRIPTION AND OBJECTIVES

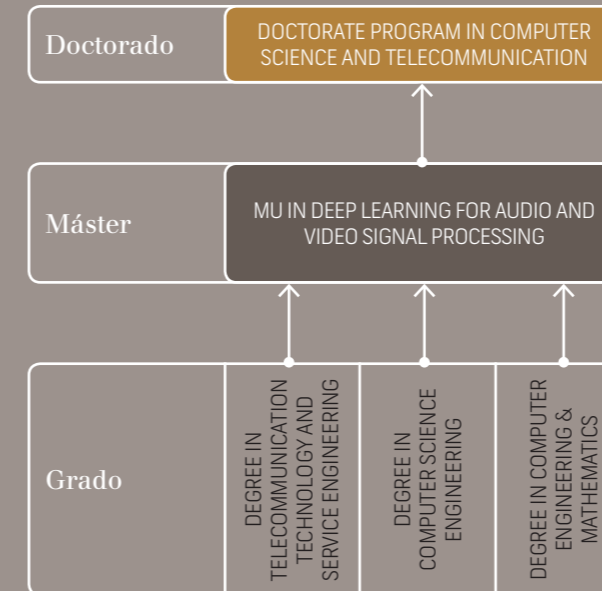
The Master in Deep Learning for Audio and Video Signal Processing is motivated by the recent huge interest in Deep Neural Networks. The results achieved by these techniques to solve problems related to automatic analysis of acoustic and visual signals have largely exceeded the results achieved by previous techniques, which has meant an unprecedented qualitative change in recent years. This situation has created an academic and professional demand for human resources capable of designing, developing and applying Deep Learning technologies. As a result of this growing interest, large technology companies have created specialized divisions that apply Deep Learning to the acoustic / visual field, such as Amazon, Apple, Google, Microsoft, Facebook and NVIDIA.

The objective of this Master's degree is to train researchers in the specific field of Deep Learning and, more specifically, in the plethora of variants and architectures resulting from the application of these techniques to acoustic and visual signals. The academic programme has a highly applied orientation, typical of a field closely linked to transfer and entrepreneurship actions.

## GRADUATES AND EMPLOYABILITY

Graduates of this master' degree are expected to be employed in ICT and technology related roles, which have become ubiquitous in many sectors. Although employment statistics are not available for this master' degree, popular job portals and international organizations indicate that there is a clear shortage of professionals in the areas covered by the master (deep learning, audio and visual processing). For more information, please refer to <https://tek.io/385Ah0P> <http://bit.ly/2Srztgc> and <http://bit.ly/2OyltjD>

## CONTEXT OF THESE STUDIES AT UAM



## FEATURES ACTIVITIES

Besides the traditional lectures and practice sessions, this master's degree considers the following activities:

- Workshop for "Writing and Presentation Skills"
- Research seminars with the participation of renowned researchers and academics, recognized nationally and internationally.
- Sessions of planning and presentation of the state of the art of the Master thesis projects in progress
- Day/conference to expose the progress of the Master's Thesis projects through short presentations and round tables.

