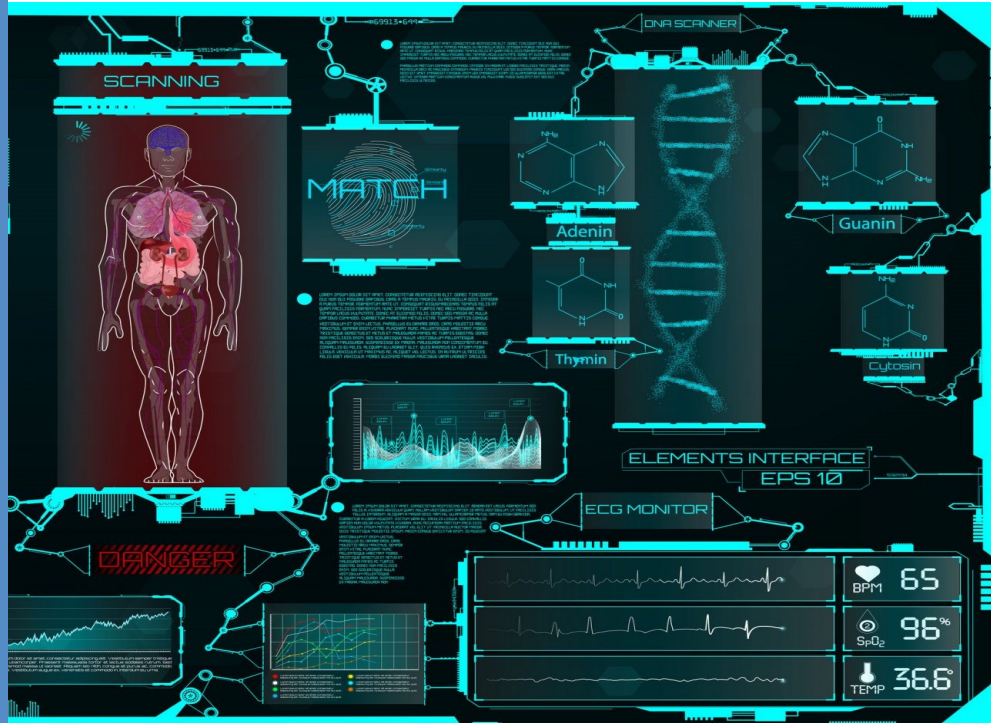


# MAIHC

## Master in Artificial Intelligence in Healthcare

6TH EDITION • JULY 2023



### VENUE

FULLY ONLINE

### LENGTH

July 2023 -  
May 2024

### FEE

5,900 € \*

### SCHOLARSHIPS

The University of Alcalá offers scholarships and flexible payment options

## Specialize in Artificial Intelligence in Healthcare

The Master in Artificial Intelligence in Healthcare is designed for **healthcare professionals**, **entrepreneurs** and **qualified candidates** from Science, Engineering and related disciplines interested in focussing their career towards this area

The programme aims to provide comprehensive training in Artificial Intelligence in Healthcare diagnostic and decision-making.

After finishing the program you will:

- Understand the foundations of Machine Learning and how it can enhance decision-making in a Healthcare context
- Have a deep knowledge of the uses and applications of Artificial Intelligence for Healthcare
- Be able to conceptualize and develop solutions based on Artificial Intelligence using the available tools
- Understand the Ethical, Legal and Social implications of the use of AI in Healthcare

## What do we offer?

- Our Postgraduate course allows you to make your training **COMPATIBLE WITH YOUR WORK** thanks to an innovative learning methodology with weekly modules and flexible exams.
- A **SOUND PREPARATION** for a total of **60 ECTS credits**, which allows to cover in depth all the concepts and applications. Master designed for health professionals. No programming knowledge required.
- A **METHODOLOGY** focussed on practice and context, using cases, real situations and technological tools that allow you to learn from the beginning.
- An **UPDATED CURRICULUM**, which ensures that our students are obtaining the latest knowledge in line with the trends and demands of Society.
- We have arranged a team of **OUTSTANDING PROFESSORS** with hands-on experience in the design of Artificial Intelligence and Cognitive in Healthcare Systems.
- Study your program at the **UNIVERSITY OF ALCALÁ**, one of the best Universities in Europe.

# Programme

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## ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Foundations of Artificial Intelligence and Machine Learning  
Supervised Learning  
Unsupervised and semi-supervised Learning  
Reinforced Learning

## MACHINE LEARNING AND BIOMEDICAL DATA

Crowdsourced Data, Biomedical Repositories and Public Data  
AI in Drug Discovery and Testing  
AI for Precision Medicine  
Management of Omics Data

## AI IN MEDICAL IMAGING DIAGNOSIS

Machine Learning in CT/MR, X-ray and Ultrasound images  
Smart Hanging Protocols and PACS  
AI in Radiotherapy Planning  
Patient-centered diagnosis and performance measurement

## AI IN HEALTHCARE MANAGEMENT

Wired Hospitals  
Predictive Management and Smart Scheduling  
Data Governance, Privacy and Accessibility  
Ethics and Regulatory Issues

## AI IN MEDICAL TELE ASSISTANCE

Virtual Healthcare Assistants  
Natural Language Processing  
Video and Speech Recognition Techniques  
Interpretability and explainable AI

## AI-BASED BUSINESS MODELS

Hybrid human-machine teams  
Process re-design  
Governance of AI and Ethics  
Business cases

## COGNITIVE SYSTEMS IN HEALTHCARE

IBM Watson Health, Merge Cardio™, Merge Hemo™  
Merge Unity™, Merge CADstream®  
Merge RISTM, MarketScan®  
Merge PACS™ and others

## DEEP LEARNING

Feedforward Neural Networks  
Convolutional Networks.  
Sequential Networks.  
Generative Adversarial Networks

## MASTER'S THESIS

Independent research paper performed by the student on one of the topics of the Master. The paper needs to be presented and defended against a Committee at the end of the Master.

## Candidate Profile

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Professionals in Healthcare, researchers in related sciences such as Biology, Pharmaceuticals or professionals of other areas interested in developing products or services in Healthcare.

## Information

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To request further information to start your admission process, please contact our Admissions Department.

<http://masteraihealth.com/>

[masteraihealth@uah.es](mailto:masteraihealth@uah.es)