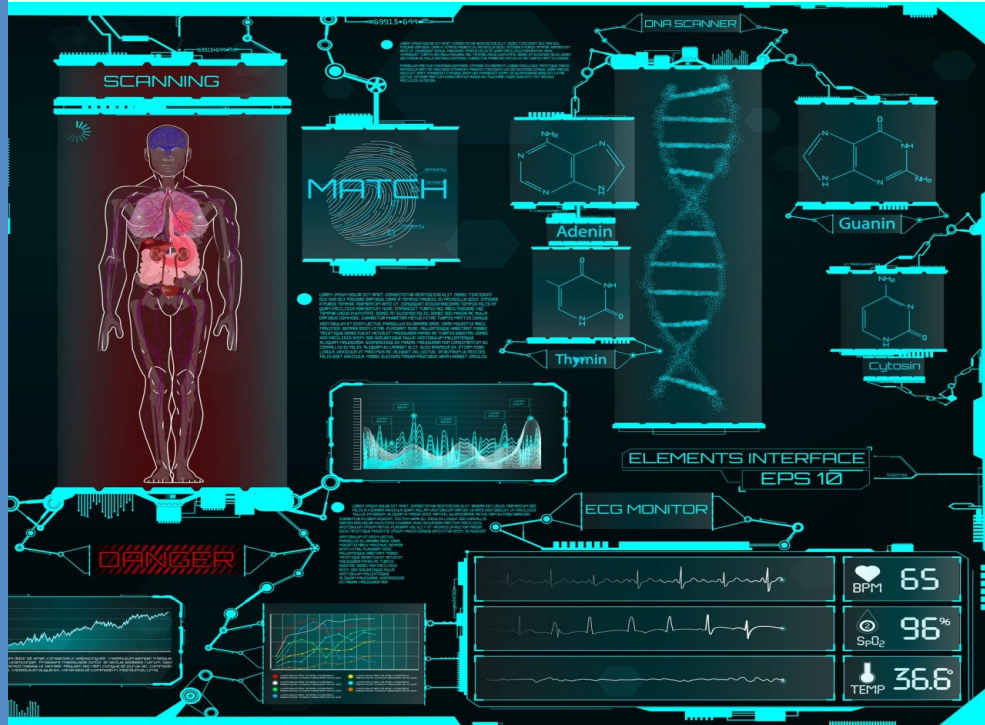


MAIHC

Master in Artificial Intelligence in Healthcare

FOURTH EDITION • NOVEMBER 2022



Universidad
de Alcalá

VENUE

FULLY ONLINE

LENGTH

November 2022 -
October 2023

FEE

5,900 € *

SCHOLARSHIPS

The University of Alcalá offers scholarships and flexible payment options

Specialize in Artificial Intelligence in Healthcare

A postgraduate course fully designed for **healthcare professionals**, **entrepreneurs** and **qualified candidates** from Science, Engineering and related disciplines interested in focussing their career towards this emerging and critical area

The Master in AI in Healthcare 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

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

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

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

<http://masteraihealth.com/>

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