# Master Degree in Biotechnologies and Applied Artificial Intelligence for Health

The *Master Degree in Biotechnologies and Applied Artificial Intelligence for Health*, held in English, is an interdisciplinary and international project aimed to provide students with robust knowledge and competences in in the application of AI and bioengineering systems in the field of health biotechnologies
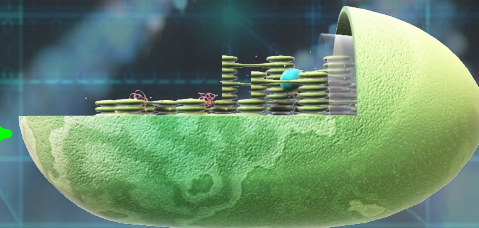
If you're interested in understanding how to apply AI technologies to the biological systems and biomarkers

If you're interested in the application of AI to the biomedical *big data* analyses
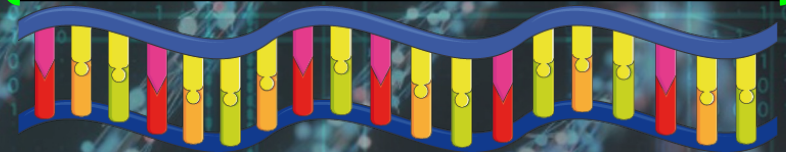
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_ if you're interested to develop advanced and innovative experimental models to study health biotechnologies_

… then come and have your experience in AI & Medical Biotechnologies!

{ _THE STUDY COURSE_ }

ADMISSIONS' REQUIREMENTS: 1° level degree in Biology, Biotechnologies, Engineering or Informatics + Admission test

1st Year – Curriculum *Biology* or *Engineering*

- % Artificial Intelligence I
- % Advanced Biochemistry
- % *Probability and Biostatistics –Biology*
- % *Bioinformatics and in silico models –Biology*
- % *Biology of cellular systems–Engineering*
- % *Genetics and Molecular Biology–Engineering*
- % Artificial Intelligence II
- % Physio-pathology
- % Biotechnologies applied to sense physiology
- % *Smart materials and sensors –Biology*
- % *Microbiology and Public Health–Engineering*

2nd Year – Common track

- % Cell Signaling and Imaging Tools
- % Bioengineering and Experimental Models in Health and Disease
- % Omics: Biotechnology and AI for Health
- % Job Placement Activities
- % Internship & Thesis

{ _The laboratory training for thesis will be focused on most innovative technologies in the University of Pisa labs or in companies/research centers_ }

Professional Skills

_Graduates in Biotechnologies and Applied AI for Health will be prepared for both academic and industrial research, particularly in biotechnology and bioinformatics industries. They will be able to understand and elaborate complex biological phenomena, to design innovative experimental models and instruments (such as biosensors, biochip), to analyze, process, store and extract big data by means of machine learning approaches. Other professional prospects include the dissemination of scientific knowledge, institutional communication (i.e. within European political institutions), or a role in the developing field of AI in Health (i.e. in private or public consulting agencies).

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https://www.biologia.unipi.it/home-wbh.html