LONDON'S GLOBAL UNIVERSITY

UCL

Graduate Open Events

MSc Artificial Intelligence for Biomedicine & Healthcare/ MSc AI for Sustainable Development

Speakers: Dr Maria Perez Ortiz, Dr Petru Manescu & current student reps

Schedule

- **Welcome**
- **Overview from Dr Maria Perez Ortiz, Programme Director of MSc AI for Sustainable Development. Overview from Dr Petru Manescu, MSc AI for Biomedicine & Healthcare.**
  - Why you should study this programme
  - Who is the programme designed for
  - Career outcomes
- **Reflections from current student reps:**
  MSc AIBH - Rita Kurban
  MSc AISD - Gabriela Gutierrez Payro
- **Q&A**

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Graduate Open Events

MSc Artificial Intelligence for Sustainable Development

Dr Maria Perez Ortiz, Programme Director

Overview of MSc Artificial Intelligence for Sustainable Development

Who is the programme designed for?

Graduates of computer science, mathematics, statistics, physical sciences, or a similar discipline.

As well as equipping you with technical training in AI, the programme will show you how to apply it to real-world scenarios, making it particularly suitable for those who want to contribute to sustainable development solutions.

Why study this programme?

- Run by UCL Computer Science, a department with an outstanding reputation in the AI world and global home of a number of AI breakthroughs.
- UCL CS was also ranked first in England and second in the UK for research power in CS and Informatics in the UK's most recent Research Excellence Framework (REF2021.)
- Departamental links with UNESCO. Partners from across the world.
- Graduates gain a strong technical ability in AI, a core understanding of the SDGs and how AI can be used to create sustainability solutions, and very relevant background on AI ethics.

Overview of MSc Artificial Intelligence for Sustainable Development

Overview of modules, types of projects (*"AI for environment and humanity"*)

Compulsory modules

Foundations of Artificial Intelligence

Probabilistic Modelling

Deep Representations and Learning

MSc Artificial Intelligence for Sustainable Development Project

Applied Artificial Intelligence

Artificial Intelligence for Domain-Specific Applications Project Preparation

AI for Sustainable Development

Overview of MSc Artificial Intelligence for Sustainable Development

Optional modules

Entrepreneurship: Theory and Practice

Affective Computing and Human-Robot Interaction

Information Retrieval and Data Mining

Statistical Natural Language Processing

Robot Vision and Navigation

Machine Vision

Accountable, Transparent, and Responsible Artificial Intelligence

(New) Reinforcement Learning, AI for Biomedicine and Healthcare, Computational Modelling for Biomedical Imaging, Auditory Computing, Perception and Interfaces.

Overview of MSc Artificial Intelligence for Sustainable Development

Career outcomes

- You will have gained a strong foundational knowledge of the technical aspects of AI that is critically needed by employers, from big tech companies to small start-ups.
- Building on this, you will have developed a creative mindset when it comes to these technologies and will have applied AI to a range of opportunities and challenges in sustainable development.
- Through your dissertation, you will have demonstrated your solution-focused technical abilities and competence in communicating effectively with a range of stakeholders.
- With the ability to blend technological know-how with a critical mindset, and applying it to social, economic, and environmental issues, you will graduate with a set of skills that are essential in today's world.

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Graduate Open Events

MSc Artificial Intelligence for Biomedicine & Healthcare

Dr Petru Manescu

Overview of MSc AI for Biomedicine & Healthcare

Who is the programme designed for?

Graduates of computer science, mathematics, statistics, physical sciences, or a similar discipline.

As well as equipping you with technical training in AI, the programme will show you how to apply it to real-world scenarios, making it particularly suitable for those who want to contribute to solutions to improve healthcare and biomedicine.

Why study this programme?

- Run by UCL Computer Science, a department with an outstanding reputation in the AI world and global home of a number of AI breakthroughs.
- UCL CS was also ranked first in England and second in the UK for research power in CS and Informatics in the UK's most recent Research Excellence Framework (REF2021.)
- Departamental links with UNESCO. Partners from across the world.
- Graduates gain a strong technical ability in AI, a core understanding of the current challenges faced by the current healthcare systems and how AI can be used to tackle these pressing challenges.

Overview of MSc Artificial Intelligence for Biomedicine and Healthcare

Overview of modules, types of projects

Compulsory modules

Foundations of Artificial Intelligence

Probabilistic Modelling

Deep Representations and Learning

MSc Artificial Intelligence for Biomedicine and Healthcare Project

Applied Artificial Intelligence

Artificial Intelligence for Domain-Specific Applications Project Preparation

AI for Biomedicine and Healthcaret

Overview of MSc Artificial Intelligence for Biomedicine and

Optional modules

Entrepreneurship: Theory and Practice

Affective Computing and Human-Robot Interaction

Computational Modelling for Biomedical Imaging

Information Retrieval and Data Mining

Statistical Natural Language Processing

Robot Vision and Navigation

Machine Vision

Accountable, Transparent, and Responsible Artificial Intelligence

Bioinformatics

Overview of MSc Artificial Intelligence for Biomedicine and Healthcare

Career outcomes

- You will have gained a strong foundational knowledge of the technical aspects of AI that is critically needed by employers, from big tech companies to small start-ups.
- Building on this, you will have developed a creative mindset when it comes to these technologies and will have applied AI to a range of opportunities and challenges in biomedicine and healthcare.
- Through your dissertation, you will have demonstrated your solution-focused technical abilities and competence in communicating effectively with clinical and non-clinical stakeholders.
- With the ability to blend technological know-how with a critical mindset, and applying it to complexities of the medical world, you will graduate with a set of skills that are essential in today's world.

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Reflections from current student reps

Rita Kurban & Gabriela Gutierrez Payro

Experience MSc Artificial Intelligence for Sustainable Development

Recommendations

- Play with Python and get comfortable using it.
- Math recap → linear algebra, probability, statistics, calculus.
- Look into some free online resources to get comfortable with the jargon.
- Familiarize yourself with the UN Sustainable Development Goals.
- Be ready to make your own experience.

Why UCL

- Unique programm.
- Research opportunities.
- International cohort.
- Capable and approachable professors.
- Scholarship opportunities.

Experience MSc AI for Biomedicine & Healthcare

- Preferred characteristics: technical background + passion for healthcare/biomedicine.
- AI4H is a sister program of AI4SD - the prereqs and most courses are the same.
- A small international cohort of ~25 people (a bit under 50 in both programmes)
- Application focused, project-driven
- New program => Good feedback system 😊
- Feel free to contact me! kurbanrita@gmail.com

Useful links

Admissions

- Frequently Asked Questions for applicants
- (Video) UCL Computer Science MSc Application Process

Scholarships

- UCL Scholarships and funding
- Computer Science Scholarships

Contacts

- PGT Admissions at Computer Science: cs.pgt-admissions@ucl.ac.uk
- Contact Graduate and Teacher Training Admissions
- General student funding enquiries: studentfunding@ucl.ac.uk