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Double-degree pathways with foreign universities
- Master’s degree in Artificial Intelligence + Master’s degree in Informatics- specialisation in Computer Science or specialisation in Software Engineering (Pontificia Universidad Católica del Perú, Perú)
The master’s degree in Artificial Intelligence is an interuniversity Universitat Politécnica de Catalunya-Universitat Rovira i Virgili-Universitat de Barcelona programme that guarantees an interdisciplinary education in which computer science intersects with philosophy, psychology, linguistics, engineering and other fields. Students will have the opportunity to access the high-performance computing resources of top research centres, such as the Barcelona Supercomputing Center-Centro Nacional de Supercomputación (BSC-CNS).

### Curriculum

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<th>1st year</th>
<th>2nd semester</th>
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<td>Computational Intelligence</td>
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<td>Introduction to Human Language Technologies</td>
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<td>Introduction to Machine Learning</td>
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<td>Planning and Approximate Reasoning</td>
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**Why this master’s degree?**

The master’s degree in Artificial Intelligence offers you an integrative and cutting-edge approach to the field and its application to real scenarios. Research in AI (artificial intelligence) at the consortium of Catalan universities supporting this programme spans knowledge representation and reasoning, machine learning, natural language processing, autonomous agents, computer vision robotics and visualisation. The emphasis is on practical techniques – and a solid theoretical background – for designing and constructing intelligent systems, enabling graduates of this degree to apply their skills in a variety of settings. These skills are in high demand in the market. As a graduate of this programme, you will have the skills to carry out AI research in academic and R&D environments and to identify how AI techniques can provide intelligent solutions to IT problems in companies and organisations.

**Aim at**

This programme is aimed at national and international students who wish to acquire advanced knowledge in AI in order to occupy positions of responsibility in industry, the public sector and academia in Catalonia, Spain or abroad. The programme covers many research areas related to the design, analysis and application of AI.

**Admission**

The master’s degree is open to holders of a bachelor’s degree who are interested in building on their knowledge of artificial intelligence and who meet the general and specific access requirements. Candidates must certify at least Level B2 in the Common European Framework of Reference for Languages (or equivalent), since the language of instruction is English.

**Double degrees and mobility**

You will have access to international double degrees taught in conjunction with top-level institutions, from which you graduate with a master’s degree in Artificial Intelligence from the Barcelona School of Informatics and a master’s degree from the partner institution. Thus, you may take the double-degree pathway that includes the master’s degree in Artificial Intelligence and the master’s degree in Informatics, with specialisations in Computer Science and Software Engineering, at the Pontificia Universidad Católica del Perú. In addition, you can make the most of the mobility programmes that the Barcelona School of Informatics participates in around the world.

**Structure**

The programme consists of 90 ECTS credits distributed over three semesters, starting in September. Delivery is face-to-face and classes are taught in the morning. Compulsory subjects are the foundations of the degree and they provide a solid grounding in artificial intelligence. The programme includes 42 ECTS credits for optional subjects grouped into areas: Multi-Agent Systems; Human-Computer Interaction; Data Science and Computational Intelligence; Knowledge Engineering and Machine Learning: Modelling, Reasoning and Problem Solving; Vision, Perception and Robotics - Assistive Technologies; and Hot Topics in AI and Professional Practice. The master’s thesis can be carried out within a research group or a project at the University or at a research centre or a company.

**A world of opportunities**

The master’s degree in Artificial Intelligence will allow you to:

- Acquire a solid background and advanced knowledge of artificial intelligence.
- Carry out paid work placement in companies.
- Broaden your education by taking a master’s degree.
- Collaborate with the many research centres and research groups linked to the UPC, the URV and the UIB.
- Participate in sports, cultural, development cooperation and leisure activities organised by student associations.

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