Enrol for the Master in Artificial Intelligence. This Master’s degree conforms to European Higher Education Area guidelines and is taught by the Department of Artificial Intelligence (DIA) at the Universidad Politécnica de Madrid’s School of Computer Science, a department at the vanguard of Artificial Intelligence research in Spain.

ACADEMIC AIMS: Train students to innovate in the field of Artificial Intelligence on two fronts:

- Invent innovative techniques and methods in the Artificial Intelligence research field and transfer these techniques and methods to society and industry, innovative software processes and solutions.
- Another aim is to provide students with a foundation for undertaking research as part of the UPM’s Doctorate in Artificial Intelligence.

Once the master be finished, the student will have the option to access the PhD in Artificial Intelligence.

Degree credits: 60 ECTS, of which 35 are for optional semester-long course units, 10 for seminars and 15 for the Master’s Final Project; all 60 ECTS can be earned in 12 months.

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<tr>
<th>Semester</th>
<th>Credits</th>
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<tr>
<td>Course Units</td>
<td>First Semester</td>
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<tr>
<td>Seminars</td>
<td>Second Semester</td>
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<tr>
<td>Master Final Project</td>
<td>Second Semester</td>
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For further information, visit :

http://www.dia.fi.upm.es/masteria
MUIA was awarded the Euro-Inf Quality Label to degree programmes that comply with the Euro-Inf Framework Standards and Accreditation Criteria.

Course duration: 2 semesters.
First semester: Students will receive lectures (students must take 7 course modules). Second semester: Seminars (students must attend at least 6) and Master’s Final Project.

Total cost of the Master’s degree:
The total cost (at 2020/21 prices) is 2,877 €, covering 60 ECTS (45.02 € per ECTS), the degree certificate and the European supplement of the degree. The price per ECTS for non-EU students is 84.07 €.

Number of places:
A total of 60 places are on offer for new students in the 2021/22 academic year.

Tuition languages:

Student profile: This Master’s degree targets higher education graduates preferentially in informatics or related disciplines (telecommunications, aeronautical, agricultural and industrial engineering, biotechnology, and mathematics or physics specializing in computation) with a special interest in Artificial Intelligence.

UPM R&D+i Center in Artificial Intelligence
AL.NNOVATION SPACE

Aimed at creating a framework for promoting research, innovation and coworking for joint development and experimentation for MUIA students.

Why take the Master in Artificial Intelligence at the UPM School of Computer Science’s Department of Artificial Intelligence?

1. Featured as the one of the 3 best Masters in Spain in Advanced Computer Science in the Spanish newspaper El Mundo, Ranking in the last 10 years.
2. The DIA offers its own student grants and bursaries in addition to the student grants and bursaries offered by other official institutions.
3. Most of our master students join research groups through internships or contracts and work under the direction of professors.
4. Department of Artificial Intelligence members have published a total of 374 scientific articles in high-impact factor international journals (Journal Citation Report), 126 of which are ranked in the first quartile.
5. MUIA promotes the students’ acquisition of innovation and entrepreneurship skills through an active collaboration with the UPM R&D+i Center in Artificial Intelligence "AI.nnovation Space".
6. The Department of Artificial Intelligence received over €19,400,000 in funding from 24 projects in national competitive calls, 21 projects in international competitive calls, and 74 projects/contracts with national or international public or private organizations over the period 2013-2017.
7. MUIA provides the foundation for the UPM’s Doctorate Programme in Artificial Intelligence.
8. Because Master’s degree teaching staff has lengthy (officially recognized) teaching and research experience in the discipline of Artificial Intelligence.
9. MUIA includes seminars taught by lecturers from prestigious foreign universities that are at the forefront of their branch of research.
10. Because the School of Computer Science has, for the ten year running, topped the Spanish league tables of higher education institutions teaching computing, compiled annually by the Spanish daily El Mundo.
11. The Montegancedo Technological Campus (I2 Tech Campus) has been awarded the distinction of International Campus of Excellence.

Structure of the Research Master in Artificial Intelligence:

MUIA is structured in the degree programme course units (5 ECTS each) and seminars (1.66 ECTS each) are organised across a total of eight modules:

**M1. Foundations of Research**
- S1: Research methodology
- S2: Project management and risk control
- S3: Legal and ethical aspects of AI
- S4: Artificial Intelligence and inclusion

**M2. Decision Analysis**
- S5: Decision analysis
- A1: Decision support systems
- A2: Participatory decision making and negotiation
- A3: Simulation methods

**M3. Machine Learning**
- S6: Machine Learning
- A4: Bayesian networks
- A5: Machine Learning
- A6: Artificial neural networks and deep learning

**M4. Natural Computing**
- S7: Natural computing
- A7: Metaheuristic-based intelligent search
- A8: Evolutionary computation
- A9: Programmable biology: DNA computing and biocircuits engineering

**M5. Knowledge Representation & Reasoning**
- S8: Knowledge representation and reasoning
- S9: Fuzzy logic
- S10: Cognitive computing
- A10: Logic programming
- A11: Multi-agent systems
- A12: Ontological engineering
- A13: Models of reasoning

**M6. Cognitive Robotics and Perception**
- S11: Cognitive robotics and perception
- S12: Principals of robotics locomotion
- A14: Computer vision
- A15: Autonomous robots

**M7. Application Areas**
- S13: Applications of Artificial Intelligence
- S14: Natural language processing
- S15: Automated planning
- A16: Biomedical informatics
- A17: Language engineering
- A18: Web science

**M8. Seminars by internationally renowned guest lecturers**