

→ **Master Degree Course in
Artificial Intelligence and Computer Science**
– **Department of Mathematics and Computer Science (DEMACS)**



The Master's degree course in Artificial Intelligence and Computer Science extends the training of the Bachelor's degree in Computer Science to a higher-level professional figure, who is capable of occupying high-level roles in companies related to new technologies, or public bodies, and who is able to continue the educational path by accessing research doctorates or specialization schools.

On the national scene, the Master of Science in Artificial Intelligence and Computer Science of the University of Calabria is characterized by a solid basic culture which, in the scientific field, is rooted in Artificial Intelligence (a sector of international excellence for the University of Calabria), and plays particular attention to innovative technologies for data analysis (Data Science) and to those related to the security of information systems (Security). It includes in-depth studies of the methodological aspects for agile project management and managerial simulation, as well as external activities, such as training internships in companies, public administration structures, and laboratories. Specifically, the Master's degree course in Artificial Intelligence and Computer Science includes two curricula structured as follows:

– **Data Science (DS):** designed to train experts in computer techniques of artificial intelligence and data analysis. In addition to acquiring the most advanced techniques of artificial intelligence, the student will acquire through this curriculum advanced knowledge of techniques and tools for data analysis (Data Analytics); in particular, the curriculum responds to the growing demand for experts in the sector due to the spread of intelligent software systems that manage large amounts of data (Big Data) to support decision making processes.

– **Computer Security (SEC):** designed to train experts in computer techniques of artificial intelligence and security of computer systems. The curriculum responds to the growing demand for a professional figure capable of mastering both the technologies for data analysis (Data Analytics) and processes, as well as designing and managing all aspects related to the security of infrastructures and software.

Learning objectives and outcomes

Masters in Artificial Intelligence and Computer Science are able to carry out the planning, design, development, construction management, estimation, testing, and management of complex plants and systems for the generation, transmission, and intelligent processing of information, even when these involve the use of advanced, innovative or experimental methodologies. Masters in Artificial Intelligence and Computer science are experts in computer techniques of data analysis and security of computer systems.

Main topics

- Artificial Intelligence
- Data Analytics
- Computer Security

Employability and careers

- Software analysts and designers
- System Analysts
- Computer networks and communications specialists
- Cyber Security Specialists
- Artificial Intelligence Specialists
- Data analytics specialist

Keywords

Artificial Intelligence, Data Science, Computer Security, Data Analytics, Deep Learning, Knowledge Representation



Duration: 2 years

Start date: October 1, 2021.

Total amount of hours (number of ECTS credits): 120 ECTS credits

Admission requirements:

Bachelor Degree in Computer Science or Computer Science Engineering. Knowledge of the English language (B2).

For details:

<https://informatica.unical.it>