UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH
UPC

Master's degree in Machine Learning and Cybersecurity for Internet-Connected Systems

The **master's degree in Machine Learning and Cybersecurity for Internet-Connected System** aims to provide advanced and specialised scientific and technological training in artificial intelligence and cybersecurity, with an emphasis on their application in internet-connected systems, including computer systems of differing degrees of complexity in general and Internet of Things systems in particular. The aim is thus to cover the current shortage of professionals who have this kind of training, which is highly valued in industry and in research in ICT technologies.

This master's degree is organised within the framework of the **European MERIT project**, through the funding of the Digital Europe programme, in collaboration with three European universities, SMEs, digital innovation hubs and research centres. The European project provides funding such as student grants.

GENERAL DETAILS

Duration and start date
  1.5 academic years, 90 ECTS credits

Timetable and delivery
  Face-to-face

Fees and grants
  Approximate fees for the master's degree, **excluding other costs** (does not include non-teaching academic fees and issuing of the degree certificate):
  €2,670 (€9,496 for non-EU residents).
  More information about fees and payment options
  More information about grants and loans

Language of instruction
  English

  Information on language use in the classroom and students' language rights.

ADMISSION

General requirements
  Academic requirements for admission to master's degrees

Specific requirements
  Candidates in possession of one of the following bachelor's degrees (or equivalent) are granted admission to the master's degree without having to take bridging courses:
  - Bachelor's degree in ICT Systems Engineering
  - Bachelor's degree in Informatics Engineering
  - Bachelor's degree in Data Science and Engineering
  - Bachelor's degree in Telecommunications Systems Engineering
  - Bachelor's degree in Telecommunications Technologies and Services Engineering
  - Bachelor's degree in Network Engineering
  Candidates in possession of one of the following bachelor's degrees (or equivalent) are granted admission to the master's degree once they have taken the bridging courses set by the master's degree committee, which will not exceed 18 ECTS credits:
  - Bachelor's degree in Industrial Electronics and Automatic Control Engineering
  - Bachelor's degree in Industrial Technology Engineering
  - Bachelor's degree in Electrical Engineering
  Admission of candidates with degrees other than the above must be established by the master's degree committee.

Places

    30

Pre-enrolment

    Pre-enrolment period open.
    Expected deadline: 05/07/2024.

    How to pre-enrol

Enrolment

    How to enrol

Legalisation of foreign documents

    All documents issued in non-EU countries must be legalised and bear the corresponding apostille.

PROFESSIONAL OPPORTUNITIES

Professional opportunities

- Intelligent software developer.
- Specialist in artificial intelligence.
- Cybersecurity consultant and analyst.
- Security manager in tech companies and ICT departments.
- Data scientist and engineer.
- Internet of Things engineer.
- Researcher at innovation and development centres.
- Teaching and/or research staff at universities.

Competencies

Generic competencies

Generic competencies are the skills that graduates acquire regardless of the specific course or field of study. The generic competencies established by the UPC are capacity for innovation and entrepreneurship, sustainability and social commitment, knowledge of a foreign language (preferably English), teamwork and proper use of information resources.

ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS

UPC school

Manresa School of Engineering (EPSEM)

Academic calendar

General academic calendar for bachelor's, master's and doctoral degrees courses

Academic regulations

Academic regulations for master's degree courses at the UPC

CURRICULUM

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