Master's degree in Innovation and Research in Informatics (MIRI)

Informatics has become a major driving force in many scientific and technological fields. In fact, current socioeconomic progress cannot be understood without considering access to and exchange of information between people and machines and between systems and institutions. There is a growing need for professionals who have strong drive, talent and solid training as provided by the master's degree in Innovation and Research in Informatics. It is designed to provide a solid background in different aspects of research in the fields of advanced computing, computer graphics and virtual reality, computer networks and distributed systems, high-performance computing and service engineering.

Specialisations

- Advanced Computing
- Computer Graphics and Virtual Reality
- Computer Networks and Distributed Systems
- Data Science and Business Intelligence
- High Performance Computing
- Service Engineering

GENERAL DETAILS

Duration and start date
Two academic years, 120 ECTS credits. Starting September and February

Timetable and delivery
Mornings. Face-to-face

Fees and grants
Approximate fees for the master's degree, excluding degree certificate fee, €6,535 (€9,803 for non-EU residents). This master's degree was selected in the Masters of Excellence grant programme of the Catalunya-La Pedrera Foundation. More information is available at the Foundation's website.

Language of instruction
English

Location
Barcelona School of Informatics (FIB)

Official degree
Recorded in the Ministry of Education's degree register

ADMISSION

General requirements
Academic requirements for admission to master's degrees

Places
80

Pre-enrolment
Pre-enrolment closed (consult the new pre-enrolment periods in the academic calendar).
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.

DOUBLE-DEGREE AGREEMENTS

Double-degree pathways with foreign universities

- Master's degree in Innovation and Research in Informatics + Master of Science Degree in Computer Engineering (Politecnico di Torino).
- Master's degree in Innovation and Research in Informatics + Maestría en Ciencias en Ingeniería de Cómputo (Instituto Politécnico Nacional, Mexico)

PROFESSIONAL OPPORTUNITIES

Professional opportunities

Graduates of the MIRI will have the ability to analyse and solve complex problems in information technology-related domains. They will thus be qualified to work in any company willing to incorporate emerging technologies in the sector, especially those with R&D centres, in public and private research centres and in university departments, in which they might work on new research and start a doctoral degree.

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

UPC school

Barcelona School of Informatics (FIB)

Academic coordinator

Daniel Jiménez González

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

Subjects | ECTS credits | Type
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FIRST SEMESTER
Algorithmic Methods for Mathematical Models | 6 | Compulsory
Algorithms, Data Structures and Databases | 6 | Optional
Concurrence, Parallelism and Distributed Systems | 6 | Compulsory
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<tr>
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**FOURTH SEMESTER**

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