Welcome!

Oscar Romero
Vice-dean of Postgraduate Studies
FIB Masters

- Master in Artificial Intelligence (MAI)
- Master in Informatics Engineering (MEI)
- Master in Innovation and Research in Informatics (MIRI)
  - Advanced Computing (MIRI-AC)
  - Computer Graphics and Virtual Reality (MIRI-CGVR)
  - Computer Networks and Distributed Systems (MIRI-CNDS)
  - High-Performance Computing (MIRI-HPC)
- Master in Data Science (MDS)
- Màster per al Professorat de Secundària (MFPS)
- Erasmus Mundus Master in Big Data Management and Analytics (BDMA)
- EU Master in High Performance Computing (EU4HPC)
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Disclaimer

We do not send communications out, we expect the students to read (and ask when in doubt) the material that is online.

You are responsible to check out:

• The academic calendar
• The regulations in place for your master
• The pre-enrolment period
• The enrolment period
• The regulations for internships
• The regulations for mobility
Academic Path

Schedule ahead!
How to Navigate the FIB Websites

• Specific details per master: https://www.fib.upc.edu/en/studies/masters/
  • Enrolment
  • Detailed curriculum / syllabus
  • Academic regulations
  • Timetables and Exams

• Hints and Tips
  • Schedule ahead elective courses
    • Courses offered once per year
    • Maximum number of seats per course
  • Other issues
    • Working experience, CCE allowed?
    • Courses from other masters?
    • External activities allowed?
      • Hackatons, seminars, etc.
  • Plan your master thesis one full semester ahead
    • Academic, at a company / research centre, in a CCE setting, etc.
Academic Aspects

• Official information for FIB courses at Racó: [https://raco.fib.upc.edu/](https://raco.fib.upc.edu/)
  • Each course must either use Racó, Atenea or other intranets for the course (e.g., Learn-SQL or jutge)

• Academic calendars: [https://www.fib.upc.edu/en/studies/academic-management/academic-calendars](https://www.fib.upc.edu/en/studies/academic-management/academic-calendars)
  • Plan your holidays, trips and personal activities according to the academic calendar

• Most masters assign a tutor to each student. Contact her/him!

• If you have doubts about the master curriculum contact the master academic responsible / coordinator:
  • MAI: Ulises Cortés ([ia@cs.upc.edu](mailto:ia@cs.upc.edu))
  • MEI, BDMA, MDS: Òscar Romero ([vd.postgrau@fib.upc.edu](mailto:vd.postgrau@fib.upc.edu))
  • MIRI-AC: Jordi Petit ([jpetit@cs.upc.edu](mailto:jpetit@cs.upc.edu))
  • MIRI-CGVR: Nuria Pelechano ([npelechano@cs.upc.edu](mailto:npelechano@cs.upc.edu))
  • MIRI-CNDS: José M. Barceló ([joseb@ac.upc.edu](mailto:joseb@ac.upc.edu))
  • MIRI-HPC, EU4HPC: Josep Llosa ([josepl@ac.upc.edu](mailto:josepl@ac.upc.edu))
  • MFPS: Josep Fernandez ([direccio.master.secundaria.fib@upc.edu](mailto:direccio.master.secundaria.fib@upc.edu))
Administrative Services

Learn about your master regulations
Administrative Services

UPC Welcome pack: https://www.upc.edu/sri/en/students/students-mobility-office/incomings/prepare-your-trip/welcome-folder/prepare

- Orientation Week: https://www.upc.edu/sri/en/students/students-mobility-office/orientation-week

The FIB secretariat takes care of the administrative procedures:

- Administrative procedures: https://www.fib.upc.edu/en/studies/academic-management
- Specific regulations for each master: https://www.fib.upc.edu/en/studies/masters/ then choose your master and go to Academic Regulations
  - Criteria for the enrolment order
  - Master’s thesis regulations
  - Fraud regulation
  - Academic progress
  - Etc.
- Face-to-face appointments with the secretariat: https://www.fib.upc.edu/en/appointments

Some tips that will smooth your administrative experiences:

- Non-EU students should contact OMI: https://www.upc.edu/sri/en/students/
- Read the web information and learn about the administrative regulation
- Formally start your administrative procedures, whenever possible, via https://esecretaria.upc.edu
- If you have any doubt, contact our secretariat at info.masters@fib.upc.edu
App UPC and UPC folder

• UPC card is a digital card
  1. Upload a photo (at the e-secretaria > My details > Personal data)
  2. Download App UPC

  ![Google Play](image)

  ![App Store](image)

• UPC folder
  • From today from 10 to 18 h at the concierge service (B6 bulding)
Inclusion and Gender Equality

• UPC has an inclusion plan
  • Psychological well-being
  • Support to disability (parking lots and academic adaptation)
  • Etc.

  https://inclusio.upc.edu/ca

• Similarly, there is a gender equality plan and observatory
  • Support to the transgender community
  • Harassment protocol
  • Actions to promote STEM among women
  • Etc.

  https://igualtat.upc.edu/ca
CCE: Internships

Stretch your professional experience
Internships

• Convenis de col·laboració universitat – empresa (CCE): 
  https://www.fib.upc.edu/en/companies/industrial-practices

Internships for students become a training activity under the supervision of the Faculty, the goal of which is to apply and complete the academic formation acquired, encouraging the professional skills that prepare for professional activities which facilitate the employment of them.

The framework of these activities is called educational cooperation agreements, regulated by Royal Decree 592/2014 which regulates the external academic practices of college students.
Internships

CCE can be established with companies having an Industrial Agreement with FIB

- Extracurricular Practices:
  - NO Elective credits
  - MDS only accepts this type of practices (except for the Master Thesis: modality B or D)

- Curricular Practices:
  - Elective ECTS (6 minimum, 12 maximum) [+ Master Thesis ECTS]
  - 30 hours → 1 ECTS
  - Master Thesis (Modality B or D)

- 900 hours per year
  - Maximum: 900 hours for MAI and MEI (90 ECTS master)
  - Maximum: 1200 hours for MIRI and MDS (120 ECTS master)

Professional Experience as elective ECTS (work contract):
- Previous or during the master
- 1600 hours per 6 credit
  - Then, proportional
Mobility and Internationalisation

Study abroad!
Mobility and Internationalisation

Plenty of options! 189 agreements with 181 universities in 41 countries

- Study abroad (one or two semesters)
  - Conditions (max ECTS): MIRI (12+18+30), MEI (30), MDS (30+30), MAI (12+18)
  - Mobility programs (many with scholarships)
    - CERN
    - Erasmus+
    - Latin America, USA and Canada
    - National Institute of Informatics (NII) Tokyo
    - China

- Double degrees
  - Escuela de posgrado de la Pontificia Universidad Católica de Perú (PUCP): MEI, MAI
  - Politecnico de Torino: MIRI
  - Università degli Studi Padova: MDS

- Internship abroad
  - Ever-open calls: Erasmus+, IAESTE, AIESEC, Entrypark
  - Academic institutions
  - Industry

- Other activities (summer schools, short stays...)
Mobility and Internationalisation

https://www.fib.upc.edu/en/mobility

MOVING

Knowing a new university, discovering a new country or improving your language skills are some of the advantages of the mobility programs offered by FIB.

*Personal experiences that will allow you to stay in foreign universities and intern at businesses worldwide.*

- Incoming
- Outgoing
- Double degrees
- International Partnerships
Mobility and Internationalisation

- Mobility calendar: [https://www.fib.upc.edu/en/mobility/outgoing/mobility-calendar](https://www.fib.upc.edu/en/mobility/outgoing/mobility-calendar)
Mobility and Internationalisation

• Information Sessions: [https://www.fib.upc.edu/en/mobility/outgoing/information-sessions](https://www.fib.upc.edu/en/mobility/outgoing/information-sessions)

Mobility information session 2022-2023

1st semester
Wednesday, 16 November 2022
In this first session we will inform on the various mobility programs, but we will focus on those whose call is in December-January and on the stays at US universities. Information sessions will be recorded.
Place: Sala d’actes Manuel Martí Recobé
• Morning session: 12:15 pm

2nd semester
Wednesday, 15 February 2023
In this second session we will inform on the various mobility programs, but we will focus on Erasmus+ SICUE and double degree calls. Information sessions will be recorded.
Place: Sala Àgora
• Morning session: 12:15 pm
• Afternoon session: 15:00 pm

Still have doubts?
Contact us at: rel.int@fib.upc.edu
Grants and Aids

Schedule ahead!
Grants and Aids

• Find all details at: [https://masters.fib.upc.edu/grants-and-financial-aid](https://masters.fib.upc.edu/grants-and-financial-aid)

**General information**

There are multiple ways to fund your studies at the Universitat Politècnica de Catalunya (UPC). Grants, scholarships, mobility grants and loans are offered by the University and other bodies.

Complete information about grants and financial aid at the UPC.

Below you will find information on specific scholarships and grants that you can apply for at the FIB. It is necessary to have applied for admission in the corresponding Master to qualify for any of them.

**Grants**

- NTT DATA (2023-2024)
- "Nacho Navarro" grants (2023-2024)
- Sidor grants (2023-2024)
- Alianza Technology Grants (2023-2024)
- FIB Visioen - FIB grants (MEI, MIRI and MAI) - 2020-2021
- Fundació Catalunya-La Pedrera (MIRI)
- Fundació Catalunya-La Pedrera (MAI)
- Accenture - Barcelona Digital Talent grants (2021-2022)

**Scholarships**

- ARCO Scholarships for MIRI Students
- CBA scholarships in AI for networking for MIRI Students
- inLab FIB
FIB Grants

• FIB participates in several consortiums and has strong links with foundations / companies who provide financial aid to our students:
  • Masters BDMA (joint degree equivalent to a triple degree)
  • Master EU4HPC (double degree)
  • NTT Data
  • Seidor
  • Nacho Navarro
  • FIB Visiona
  • Allianz Technology
  • ...
Research Groups / Others Grants

• *Beques d'aprenentatge* “learning grants”: https://millot.upc.edu/CONV/indexBeques/beaList

• *Beques d'iniciació a la recerca* “Junior researcher grants”: https://millot.upc.edu/CONV/indexBeques/becList

Overall info about these grants: https://serveistic.upc.edu/ca/gestio-de-convocatories-de-beques/el-servei/descripcio-del-servei
Research and Innovation

Learn how to do research!
Research and Innovation

• UPC is a leading research institution
  • Start-ups, spin-offs, innovation and technology transfer: [https://www.upc.edu/en/r-d-i/innovation](https://www.upc.edu/en/r-d-i/innovation)
  • UPC’s centre for Development Cooperation: [https://www.upc.edu/ccd/en](https://www.upc.edu/ccd/en)

• Complement your time during the masters with research-oriented added-value tasks

• One strong aspect of our masters is that our teaching staff are also researchers with wide experience on the topics they teach
  • Belong to different departments and research groups
  • Have strong networks with researchers all over the world
    • You may want to do research under international mobility

• Formalise your research experience with research grants or CCE agreements

• Areas covered by our research groups:
  • Mathematics (MA)
  • Business Administration (OE)
  • Computer Architecture (AC)
  • Physics (FIS)
  • Services and Information Systems Engineering (ESSI)
  • Computer Science (CS)
  • Statistics and Operational Research (EIO)
  • Systems Engineering, Automatic Control and Industrial Informatics (ESAII)
Research Groups (https://futur.upc.edu/)

**Mathematics**
- MD: Discrete Mathematics
- DCCG: Computational Geometry and Combinatorial Geometry
- TN: Numbers Theory
- GRTJ: Game Theory
- GRAA: Applied Analysis
- GREC: Knowledge Engineering (with ESAII)
- MMAC: Mathematical Models Applied to Social and Natural Sciences

**Business Administration**
- EOLI: Industrial Engineering and Logistics
- GREDIC: Innovation and Knowledge Economy
- LEAN MRG: Lean Management
- CERpIE: Research & Development Centre for Enterprises’ Improvement and Innovation

**Services and Information System Engineering**
- inSSIDE: integrated Software, Services, Information and Data Engineering
- MPI: Modelling and Processing Information
- DTIM: Database Technologies and Information Management

**Systems Engineering, Automatic Control and Industrial Informatics**
- ACES: Advanced Control of Energy Systems
- ACP: Automation and Process Control
- GREC: Knowledge Engineering (with MAII)
- GRINS: Intelligent Robotics and Systems
- NOLIN: Nonlinear Physics and Unbalanced Systems
- SAC: Advanced Control Systems
- SISBIO: Biomedical Signals and Systems
- VIS: Artificial Vision and Intelligent Systems
Research Groups

**Computer Architecture**
- ANA: Advanced Network Architectures
- ARCO: Architectures and Compilers
- CAP: High Performance Computing
- CBA: Broadband Communications Systems
- CNDS: Computer Networks and Distributed Systems
- DAMA: Data Management
- DMAG: Distributed Multimedia Applications

**Physics and Nuclear Engineering**
- CS-SIMBIO: Complex Systems - Computer Simulation of Materials and Biological System
- DILAB: Dielectric Material Physics Laboratory
- DONLL: Nonlinear Dynamics, Nonlinear Optics and Lasers
- GAA: Astronomy & Astrophysics
- GCM: Characterization of Materials
- GIEP: Innovative Education in Physics
- GREENER: Studies in Energy and Radiation
- NERG: Nuclear Engineering
- SIMCON: Computer Simulation in Condensed Matter
- GRPFM: Physical Properties of the Materials

**Computer Science**
- ALBCOM: Algorithms, Biocomputing, Complexity and Formal Methods
- GIE: Engineering Computing
- GRPLN: Natural Language Processing
- KEMLG: Knowledge Engineering and Machine Learning (with EIO)
- LARCA: Relational Algorithms, Complexity and Learning
- LOGPROG: Logic and Programming
- MOVING: Modelling, Visualization, Interaction and Virtual Reality
- SOCO: Soft Computing
- STH: Sustainability, Technology and Humanities

**Statistics and Operational Research**
- LAIRE: Laboratory of Aeronautical and Industrial Research and Studies
- GRESA: Applied Statistics
- LIAM: Laboratory of Information Analysis and Modelling
- KEMLG: Knowledge Engineering and Machine Learning (with LSI)
- GRASS: Survival Analysis Statistics
- GREMA: Mathematical Statistics and its Applications
- GNOM: Numerical Optimization and Modelling
- PROMALS: Mathematical Programming, Logistics and Simulation
Social Life

Enjoy and join university life!
Social Life

• FIB promotes social activities: https://www.fib.upc.edu/en/fib/university-life
WiDS: Women in Data Science Barcelona 2021
Women in Data Science is taking place in Barcelona next June 22nd. Last preparations of the WiDS – Women in Data Science, Barcelona 2021, do not miss it! It will be very beneficial. You can visit the website where you can register without any cost and you can check the program. The WiDS is a unique opportunity to connect with women in data science and technology, and to learn about the latest trends and developments in the field. It is organized by the Ministry of Economy and Digital Transformation of the Government of Spain and the Spanish Ministry of Education, Culture and Sport. In WiDS 2021, we will have keynote speakers, workshops, and networking events to help you learn more about the field and connect with others. We hope to see you there!
Do you have any doubt?

• Academic issues:
  • MAI: Ulises Cortés (ia@cs.upc.edu)
  • MEI, BDMA, MDS: Òscar Romero (vd.postgrau@fib.upc.edu)
  • MIRI-AC: Jordi Petit (jpetit@cs.upc.edu)
  • MIRI-CGVR: Nuria Pelechano (npelechano@cs.upc.edu)
  • MIRI-CNDS: José M. Barceló (joseb@ac.upc.edu)
  • MIRI-HPC, EU4HPC: Josep Llosa (josepll@ac.upc.edu)
  • MFPS: Josep Fernandez (direccio.master.secundaria.fib@upc.edu)

• Administrative issues:
  • FIB Master’s secretariat: info.masters@fib.upc.edu