

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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- Administrative Services
- CCE: Internships
- Mobility and Internationalisation
- Grants and Aids
- Research and Innovation
- Social Life







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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!



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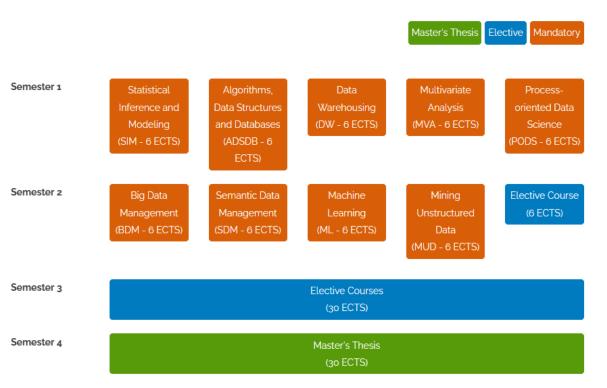
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How to Navigate the FIB Websites

- Specific details per master: <u>https://www.fib.upc.edu/en/studies/masters/</u>
 - 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

DE CATALUNYA

- 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: <u>https://raco.fib.upc.edu/</u>
 - Each course must either use Racó, <u>Atenea</u> or other intranets for the course (e.g., <u>Learn-SQL</u> or <u>jutge</u>)
- Academic calendars: <u>https://www.fib.upc.edu/en/studies/academic-management/academic-calendars</u>
 - 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)
 - MEI, BDMA, MDS: Òscar Romero (<u>vd.postgrau@fib.upc.edu</u>)
 - MIRI-AC: Jordi Petit (jpetit@cs.upc.edu)
 - MIRI-CGVR: Nuria Pelechano (<u>npelechano@cs.upc.edu</u>)
 - 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)



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Administrative Services

Learn about your master regulations



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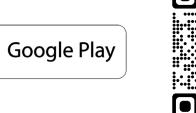
Administrative Services

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

- 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: <u>https://www.fib.upc.edu/en/studies/masters/</u> 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: <u>https://www.upc.edu/sri/en/students/</u>
 - Read the web information and learn about the administrative regulation
 - Formally start your administrative procedures, whenever possible, via <u>https://esecretaria.upc.edu</u>
 - 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 <u>e-secretaria</u> > My details > Personal data)
 - 2. Download App UPC









- 3. Log in using your UPC user (username & password)
- UPC folder
 - From today from 10 to 18 h at the concierge service (B6 bulding)





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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



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CCE: Internships

Stretch your professional experience



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Internships

FIB Visiona

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

Industrial Practices Home » Companies » Industrial Practices Industrial Practices Offers list

Posting offers Job Placements Regulations Information for companies Information for students Internships for students become a training activity under the supervision of the Faculty, the goal of which is to apply and complete Sponsorship 5

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.



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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 \rightarrow 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





Study abroad!



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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...)







Studies Mobility Research

Companies The FIB

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Mobility



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.





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• Mobility calendar: <u>https://www.fib.upc.edu/en/mobility/outgoing/mobility-calendar</u>

1obility Calenda			
ome » Mobility » Outgoing »	Mobility Ca	ilendar	
Mobility Calendar		Calls	Periods
Information Sessions		Place application for foreign universities: programa Erasmus+, Latin America, CINDA, Canada, Taiwan and China (2nd call)	∰ 13 Sep 23 - 18 Sep 23
Mobility experiences		X Application for the National Institute of Informatics (NII) in Tokyo - 1st call	🋗 13 Apr 23 - 15 May 23
Study abroad		★ Google Summer of Code	🛗 20 Mar 23 - 04 Apr 23
Internship abroad		★ Place application for foreign universities: Erasmus+, Latin America, Taiwan, China and double degrees	🏙 17 Feb 23 - 01 Mar 23
Other activities abroad		X Application for a place at Spanish universities in the SICUE programme	🏙 13 Feb 23 - 27 Feb 23
		🗙 iWeek a Paris	🏙 o2 Jan 23 - 15 Feb 23
		X Application for mobility in the US	🏙 01 Dec 22 - 24 Jan 23
		× Vulcanus programme	🛗 04 Nov 22 - 13 Jan 23

Application for the National Institute of Informatics (NII) in Tokyo - 2nd call
 Application for a mobility place with the programme UNITECH
 17 Dec 21 - 18 Jan 22

Opened ✔ To be open! Closed X



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• 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. Infomation sessions will be recorded. Place: Sala d'actes Manuel Martí Recober

Morning session: 12:15 pm

For mobility stays during the academic

2nd semester

year 2023-2024

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

Mobility Presentation 2021-2022 Q2



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rel.int@fib.upc.edu

Contact us at:



Grants and Aids

Schedule ahead!



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Grants and Aids

• Find all details at: 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 - BarcelonaTech (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)	*
Seidor grants (2023-2024)	•
Allianz Technology Grants (2023-2024)	•
FIB Visiona - 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	~
BA scholarships in AI for networking for MIRI Students	~
nLab FIB	~



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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": <u>https://millot.upc.edu/CONV/indexBeques/beaList</u>
- *Beques d'iniciació a la recerca "*Junior researcher grants": <u>https://millot.upc.edu/CONV/indexBeques/becList</u>

Overall info about these grants: <u>https://serveistic.upc.edu/ca/gestio-de-convocatories-de-beques/el-servei/descripcio-del-servei</u>



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Research and Innovation

Learn how to do research!



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Research and Innovation

- UPC is a leading research institution
 - Top university obtaining H2020 projects: <u>https://www.upc.edu/en/press-room/news/the-upc-is-still-the-top-spanish-university-in-obtaining-funds-from-the-h2020-programme</u>
 - Start-ups, spin-offs, innovation and technology transfer: <u>https://www.upc.edu/en/r-d-i/innovation</u>
 - UPC's centre for Development Cooperation: <u>https://www.upc.edu/ccd/en</u>
- 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 ٠
 - 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 Science (CS)
 - Computer Architecture (AC)
 - Physics (FIS)

- Services and Information Systems Engineering (ESSI)
- Statistics and Operational Research (EIO)
- Systems Engineering, Automatic Control and Industrial Informatics (ESAII) ٠



Research Groups (<u>https://futur.upc.edu/</u>)

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

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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!



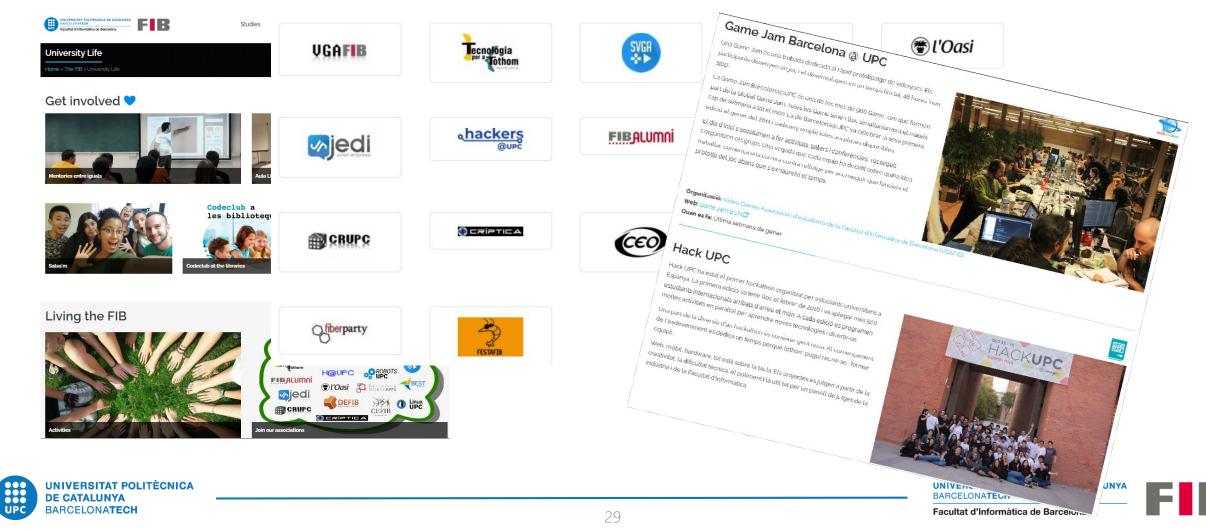
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Social Life

• FIB promotes social activities: <u>https://www.fib.upc.edu/en/fib/university-life</u>







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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)
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- Administrative issues:
 - FIB Master's secretariat: <u>info.masters@fib.upc.edu</u>



