



FIB MASTERS

Master in Innovation and Research in Informatics (MIRI)

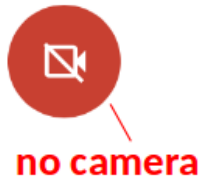
Oscar Romero

Vice-dean of Postgraduate Studies

info.masters@fib.upc.edu

Welcome to FIB Master's Degree Informative Virtual Session

- Please, mute your micro
- Please, turn off your camera
- Only speaker will share screen to present



Do not try to present

- Any question should be via chat but let's do it at the end of the talk



This will open lateral chat



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@mediafib

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FIB:

Facultat d'Informàtica de Barcelona

Universitat Politècnica de Catalunya (UPC-BarcelonaTech)

About UPC

Universitat Politècnica de Catalunya (UPC-BarcelonaTech) is a public higher education and research institution that is specialised in the fields of architecture, science and engineering and one of the leading technical universities in Europe.

Every year, more than 6,000 bachelor's and master's students and more than 500 doctoral students graduate.

UPC values:

Social responsibility

Sustainability

Equal opportunities

Cooperation and solidarity



UPC Main Indicators

UPC Community

- 23,630 bachelor's students
- 5,039 master's degree students
- 2,038 doctoral degree students
- 2,929 lifelong learning students
- 3,459 teaching and research staff members
- 2,061 administrative and service staff
- 69,442 UPC alumni members
- 351 doctoral theses defended
- 2,448 graduates of master's degrees
- 3,476 graduates of bachelor's degrees

Knowledge

- 66 bachelor's degrees 2021-2022
- 81 master's programmes 2021-2022
- 45 doctoral programmes 2021-2022
- 265 continuing education programmes
- 25 patents
- 37 technology companies in which the UPC has a shareholding
- 159 scientific and technical awards received
- 2,273 articles published in scientific journals
- €55,077,585 turnover for R&D projects (2020)

UPC in the world

- 3,823 students participating in educational cooperation agreements with companies
- 13 company chairs
- 13 companies set up last year
- 2,456 companies and other entities that have signed collaboration agreements with the UPC
- 56 international double-degree agreements with 32 universities
- 1,430 students in international mobility programmes
- 787 UPC students (outgoing)
- 643 mobility students at the UPC (incoming)
- 45 development cooperation projects
- 15 international networks with the UPC as a member
- 4 UNESCO chairs

* 2020-2021 academic year

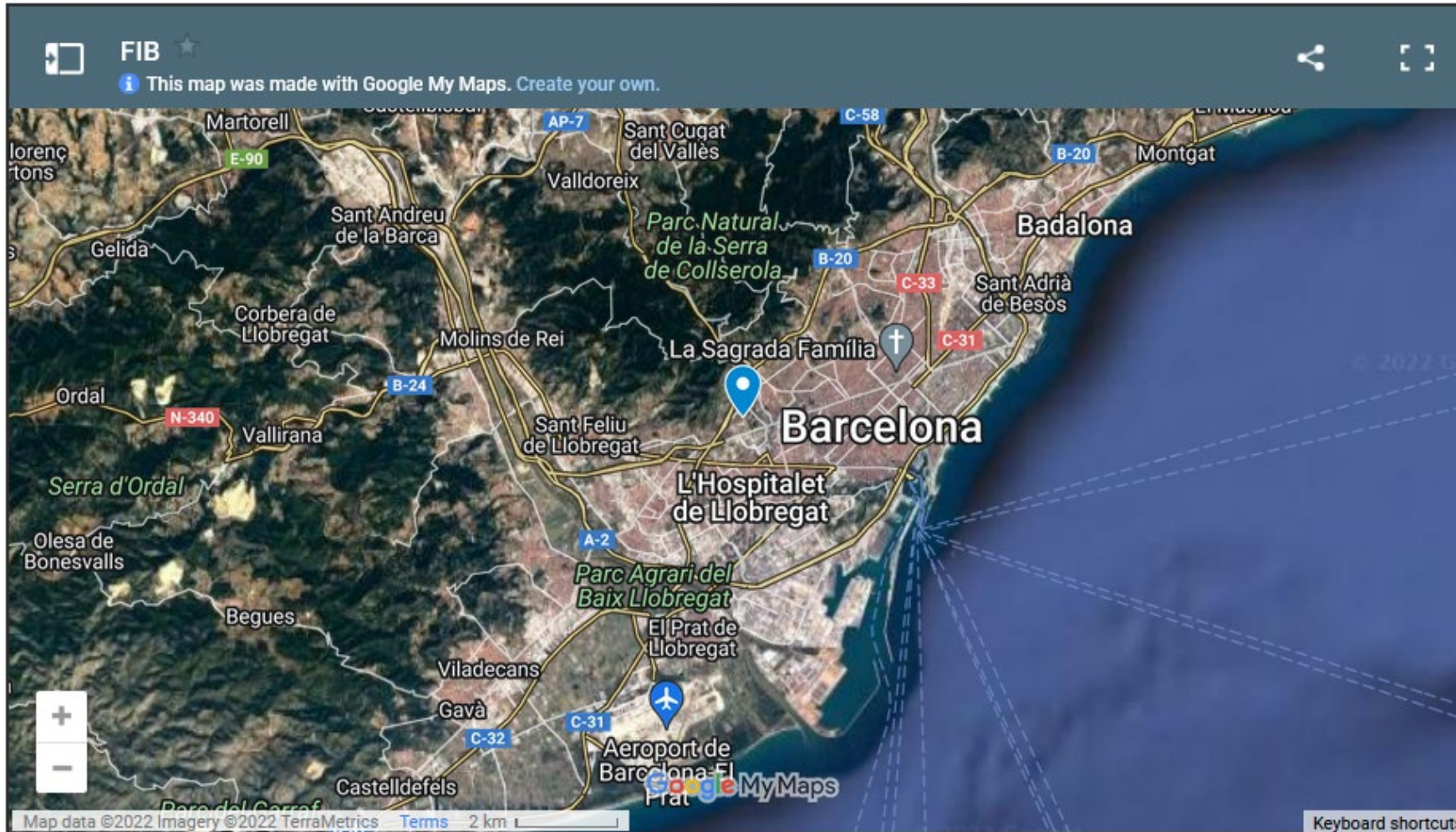
About FIB

The Facultat d'Informàtica de Barcelona (Barcelona School of Informatics) belongs to UPC and it is the reference centre for Informatics studies since its inception in 1976, and the beginning of the educational activities during 1977-1978.

Throughout these 40 years, the faculty has been in charge of the bachelor's degree, diploma courses, technical engineering and master degrees and currently the formal qualifications in the field of Computer Science and related subjects.



FIB: Where?



Address

B6 Building at Campus Nord
Jordi Girona street,1-3
08034 Barcelona

Contact

Email: Info.masters@fib.upc.edu

Web: <http://www.fib.upc.edu/>

Social Networking

<https://www.facebook.com/fib.upc>

https://twitter.com/fib_upc

<https://www.youtube.com/user/mediafib>

<https://www.instagram.com/fib.upc/>

FIB: Mission

- Provide education on **informatics engineering**
 - Promote the dissemination of information technologies to contribute to society improvements
 - Provide a strong background to our students that will be used throughout their professional life
- **Prioritizing lasting concepts**
- Promoting **effective working habits and team working**
- Stimulating their students' **ability of self-sufficiency**

FIB: Quality Indicators

Our masters are externally evaluated and certified with the maximum quality labels by international and national evaluation organisms

- FIB established the processes and mechanisms to implement Internal Quality Assurance System (IAQS). This accreditation process is carried out by quality agencies such as AQU/ENQA and allows supervising the performance of studies and informs the society about its quality.
 - MIRI obtained the maximum quality label **AQU-Excellence**
- What aspects do quality agencies highlight about our masters:
 - Programme learning outcomes
 - Teaching staff
 - Learning support services and resources



FIB in Numbers

2106

Students

3

Bachelor's degrees

7

Master's degrees

443

Graduates 19-20

40

Years in existence

296

Teaching and research staff

14

Student associations

10170

Total graduates



FIB: Our Reputation

International Rankings

- Times Higher Education – Computer Science: 93
 - 1st in Spain
- QS World University Rankings – Computer Science: 51-100
 - 1st in Spain
- US News Best Global Univ. Rankings – Computer Science: 37
 - 1st in Spain

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Master in Innovation and Research in Informatics

Summary

Master in Innovation and Research in Informatics



This master offers a strong and rigorous background in research and innovation in 4 fields of informatics:

- *Advanced Computing (AC),*
- *Computer Graphics and Virtual Reality (CGVR),*
- *Computer Networks and Distributed Systems (CNDS),*
- *High-Performance Computing (HPC).*
- Accreditations: EQUAINE, AQU-Excellence
- Language: English (B2)
- 120 ECTS: 2 years
 - 30 Common compulsory
 - 48 Specialisation (4 specialisations)
 - 12 Electives
 - 30 Master thesis
- 4 Specialisations:
 - AC: <https://masters.fib.upc.edu/masters/miri-advanced-computing>
 - CGVR: <https://masters.fib.upc.edu/masters/miri-computer-graphics-and-virtual-reality>
 - CNDS: <https://masters.fib.upc.edu/masters/miri-computer-networks-and-distributed-systems>
 - HPC: <https://masters.fib.upc.edu/masters/miri-high-performance-computing>
- Industrial Agreements – Curricular Internships, Professional Experience (elective ECTS)
- Complementary courses might be required

Research and Innovation

- UPC is a leading research institution
 - Top university obtaining H2020 projects: <https://www.upc.edu/en/press-room/news/the-upc-is-still-the-top-spanish-university-in-obtaining-funds-from-the-h2020-programme>
 - Start-ups, spin-offs, innovation and technology transfer: <https://www.upc.edu/en/r-d-i/innovation>
 - UPC's centre for Development Cooperation: <https://www.upc.edu/ccd/en>
- Complement your time during the masters with 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**

Advanced Computing

Advanced Computing



Advanced Computing approaches complex computational problems from both theoretical and practical angles:

- Understand the **limitations** of the problems.
 - Use these insights to provide **novel** and **efficient** algorithmic solutions.
 - Acquire **analytical** tools and **skills** to understand the **fundamental principles** of computing.
 - Develop problem-solving skills to build **cutting edge solutions** through the understanding and the interplay between theory and practice.
-
- Applications:
 - Intelligent systems
 - Social networks
 - Machine learning and data mining
 - Human language processing
 - Cloud and web technologies
 - Algorithmics
 - Game theory
 - VLSI design
 - ...

Opportunities



- Participation with research groups
 - ALBCOM: Algorithms, Computational Biology, Complexity and Formal Methods
 - TALP: Center for Language and Speech Technologies and Applications
 - LOGPROG: Logic and Programming
 - LARCA: Relational Algorithmics, Complexity and Learning Laboratory
 - ...
- Job opportunities
 - Academy: local and international universities
 - Big tech companies: Google, Amazon, ...
 - CAD Companies: Qualitech, Marvell, SemiDynamics, Mentor Graphics, ...
 - Data Science: Planeta, Factorial HR, Quida, ...

Exemplary Master Theses

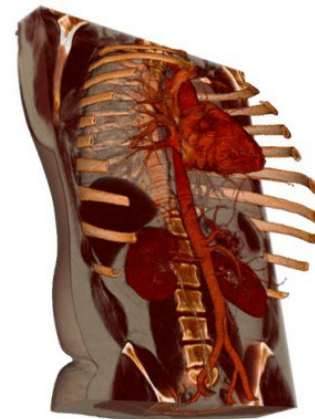
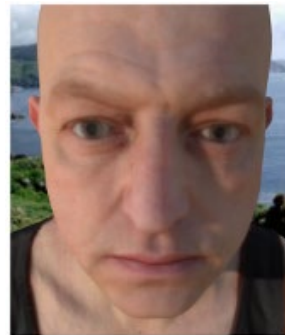


- Student: Josep Sànchez-Ferreres
 - Advisors: Josep Carmona, Lluís Padró
 - Abstract: Modeling techniques in Business Process Management often suffer from low adoption due to the variety of profiles found in organizations. This project aims to provide a novel alternative to BPM documentation, ATD, based on annotated process descriptions in natural language.
 - Further outcomes:
 - Spin-off co-founder: Process Talks, SL
 - Patent: PCT/EP2021/064772
 - PhD with top journal and conference publications: IEEE TLT, SoSym, DKE, CAiSE, BPM, etc.
- Student: Juan Pablo Royo Sales
 - Advisors: Edelmira Pasarella, Maria-Esther Vidal, Cristina Zoltan
 - Abstract: This work tackles the problem of providing an algorithm for incrementally enumerating bitriangles in large bipartite networks.
 - Further outcomes:
 - Publications: PROLE2021
 - Software: Dynamic Pipeline Framework.
 - <https://hackage.haskell.org/package/dynamic-pipeline>
 - <https://github.com/jproyo/upc-miri-tfm/tree/main/bt-graph-dp>

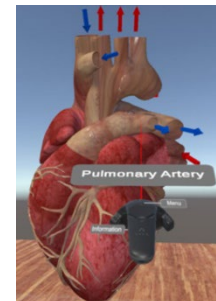
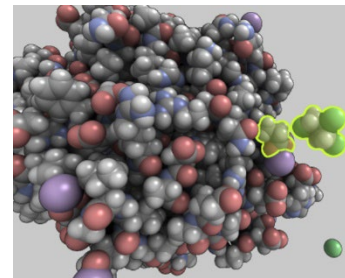
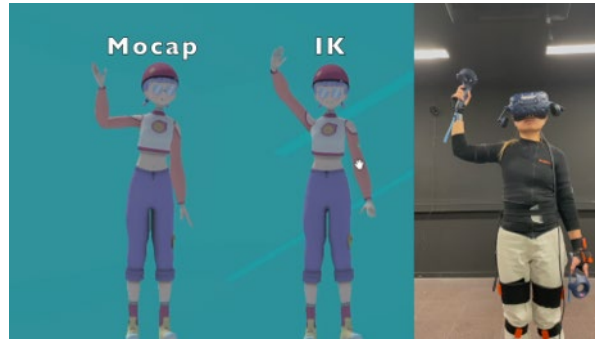
Computer Graphics and Virtual Reality

MIRI - Computer Graphics & Virtual Reality

- State-of-the-art computer graphics
 - design efficient algorithms and solutions for real-life problems (education, medicine, architecture, cultural heritage, urban design, animation).
 - Virtual Reality: building VR applications for HMDs and 3D large screens (powerwall). Hands on experience with 3D interaction and navigation.



Opportunities



• Participate in research projects

- by taking SIRI credits
- working as an intern at ViRVIG
- Master tesis with us or our international collaborators
- Co-authoring research papers
- Attend the ViRVIG seminar and other online conferences

Topics

- Advanced 3D graphics
- Procedural modeling
- Real-time rendering
- Immersive interaction
- Geometry processing
- Virtual and Augmented Reality
- Computer Animation and Simulation
- Physically-based animation & rendering
- Modeling complex systems
- Visualization of complex n-dimensional information

- Private sector: Engineering, medical imaging, 3D printing, graphics processors, special effects, Virtual Reality
- Research centers and Universities



Rockstar
Games



NVIDIA



MEDIAPRO



SENER



UNIVERSITAT DE
BARCELONA



Trinity
College
Dublin
The University of Dublin



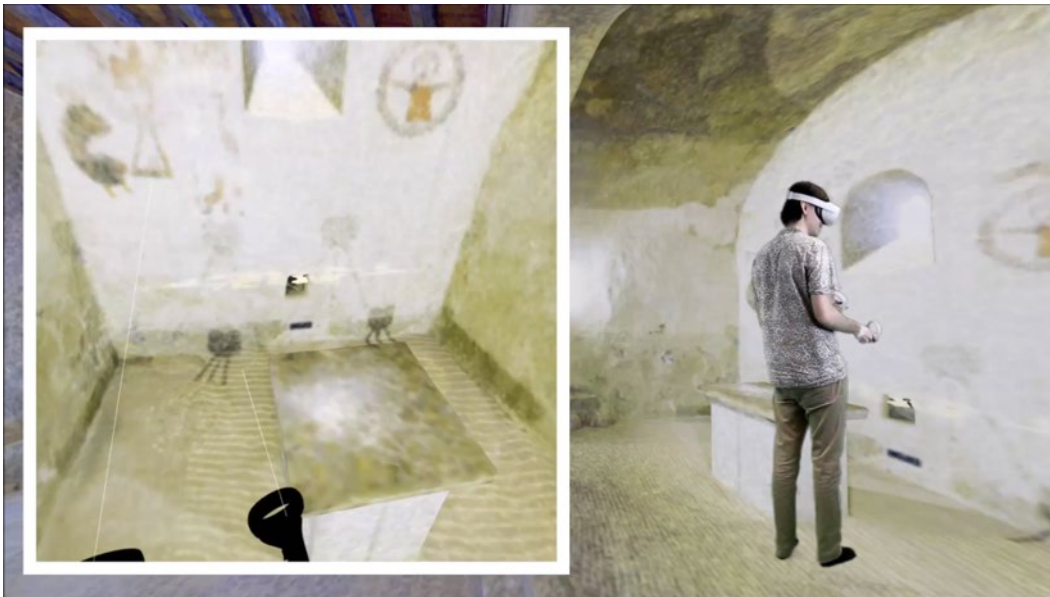
Universidad
Rey Juan Carlos



Exemplary Master Theses

A WebXR-based platform for mixed geometry-based and image-based exploration of cultural heritage models

TFM: Arnau Farràs (2019-2021)



Eurographics Workshop on Graphics and Cultural Heritage 2021

Visualization of ensembles of molecular simulation trajectories

TFM: David Duran (2016-2018)

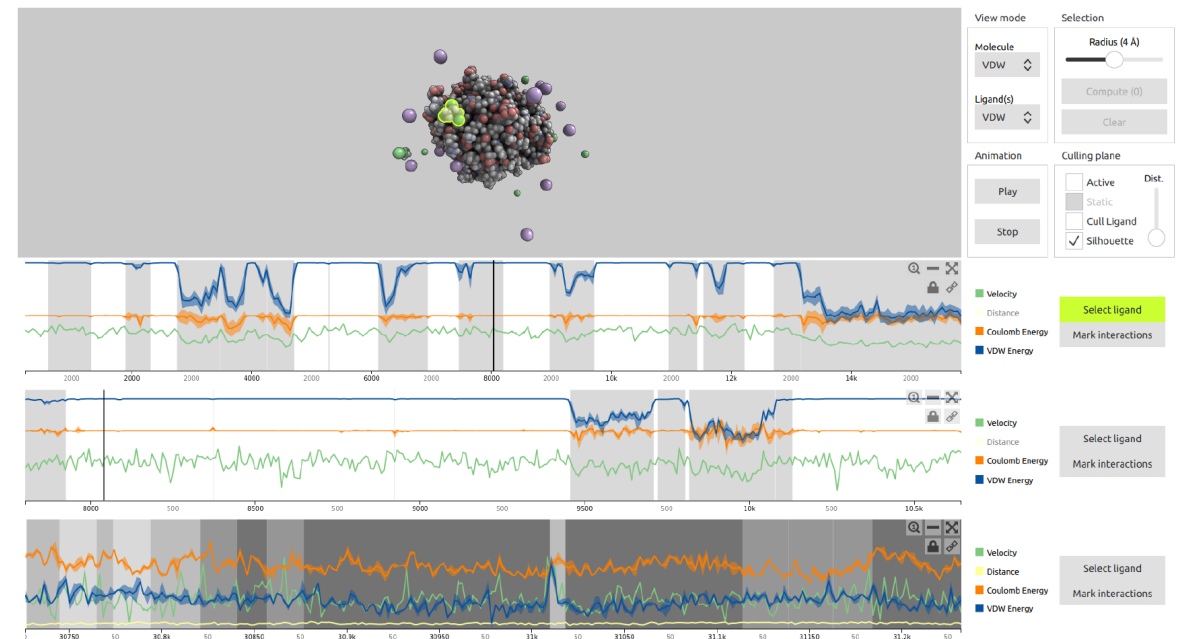


Fig. 1. Overview of the system: The 3D exploration of the molecular trajectory appears on top of the enhanced charts of three different ligands involved in a simulation. The plots are linked bidirectionally: researchers can perform selections in 2D or 3D to see relevant information highlighted in the other view. A 3D selection, for instance, will highlight the intervals of the 2D plots where the ligand interacts with the selected region.

IEEE Transactions on Visualization and Computer Graphics 2019

Computer Networks and Distributed Systems

Computer Networks

It is a set of devices that allows us to move data across nodes, including documents, sensor data, content sharing, audio, video, etc. They provide a fast a reliable way to share information and resources within business. Examples: Internet, mobile networks, cellular networks, sensor networks, optical networks, nano-networks, etc.

Topics covered

- Trends in the evolution of network architectures
- Routing and inter-networking
- Transport networks (backbone)
- New network and transport protocols
- Resource management
- 5G network architecture
- Software defined networks (SDN)
- Next generation Internet
- Energy oriented Internet
- New networking paradigms (nano-networks, graphene, miniaturizes wireless comm)
- Data centers and clouds
- Security in applications including blockchain and quantum security
- multimedia content transmission

Distributed Systems

DS is a computing environment in which various components are spread across multiple computers (or other computing devices) on a network. These devices split up the work, coordinating their efforts to complete the job more efficiently than if a single device had been responsible for the task. DS provide scalability, reliability, efficiency and a better performance. Applications: WWW, P2P systems, network file systems, wireless sensor networks, distributed cache systems, distributed databases, blockchains, infrastructures for big data, etc.

Topics covered

- P2P networks and overlay networks
- Routing in overlay networks
- Publish/subscribe, group communication, self-properties, incentives, management, resource allocation, security and anonymity, characterization and evaluation
- Content and media distribution, storage, file sharing, communication, computing, social networks
- Cloud computing fundamentals (models for large scale systems, middleware, content distribution, virtualization, etc)
- Big data analytics in the cloud
- Cloud service offerings (such as AWS, Google AppEngine, Open Stack, OpenNebula)

Opportunities



- **Research groups associated to CNDS specialitation (opportunities to get fellowships to collaborate with some of the research groups and opportunities to pursue the Master Thesis in some research topics in which these groups are involved):**
 - Statistical Analysis of Network and Systems (SANS): <http://sans.ac.upc.edu>
 - IoT, wireless sensor calibration, machine learning, deep learning, human mobility patterns characterization, smart cities, ...
 - Distributed Systems Group (DSG): <http://dsg.ac.upc.edu>
 - cloud computing, community networks, decentralized systems, resource management through virtualization, ...
 - VIRTOUS: <https://virtuos.site.ac.upc.edu>
 - Virtualization and cloud computing, ...
 - Broadband Communication Systems: <https://cba.upc.edu>
 - Optical networks, traffic monitoring and analysis, nanonetworking communications, networks –on-chip, green networking networks architectures, low-energy networks, cybersecurity, ...
 - High Performance Computing:
 - management of Software Defined Infrastructures, IoT stream processing platforms, automated characterization of cost-effectiveness of Big Data deployments, Build hardware prototypes for accelerating data-centric workloads, ...
 - Deep Learning, Machine Learning & Artificial Intelligence, ...

Exemplary Master Theses



- Student: Pau Marcer Albareda
- Advisors: Beatriz Otero and Eva Marín
- Title: Fog - Applying blockchain to secure a distributed set of clusters
- Abstract: we can affirm that we are moving towards a world where everything will be connected (i.e. our cars, our houses, our wearable devices). The current centralized security architectures do not scale well enough in order to be applied on the Fog. Those models such as Certificate Authorities (CA's) are centralized, usually on cloud providers, and offer a much more static security. Therefore, we require new and completely distributed security architectures, capable of being flexible and scalable, while at the same time providing fault proof security to the Fog.

- Student: Pau Ferrer Cid
- Advisors: José M. Barceló and Jorge Garcia Vidal
- Title: Calibration of low-cost air pollutant sensors using machine learning techniques
- Abstract: Nowadays concern about air pollution has risen due to the effects of the climate change. The application of machine learning methods for the calibration of low-cost sensors is studied. The short-term, long-term, sensor fusion and training set size needed are analysed considering real scenarios.

High Performance Computing

MIRI-High Performance Computing



- HPC is the foundation for scientific, industrial, and societal advancements.
- It is through data that groundbreaking scientific discoveries are made, game-changing innovations are fueled, and quality of life is improved for billions of people around the globe.
- Simulation, data storage and analysis, artificial intelligence (AI), and machine learning (ML) technology all demand growing compute power that can only be leveraged through HPC
- HPC solutions are used for a variety of purposes across multiple industries. Examples include:
 - **Research labs.** HPC is used to help scientists find sources of renewable energy, understand the evolution of our universe, predict and track storms, and create new materials.
 - **Media and entertainment.** HPC is used to edit feature films, render mind-blowing special effects, and stream live events around the world.
 - **Oil and gas.** HPC is used to accurately identify where to drill and to help boost.
 - **Artificial intelligence and machine learning.** HPC is used to detect credit card fraud, provide self-guided technical support, teach self-driving vehicles, and improve cancer screening techniques.
 - **Financial services.** HPC is used to track real-time stock trends and automate trading.
 - It is used to **design** new products, **simulate** test scenarios, and make sure that parts are kept in stock so that production lines aren't held up.
 - It is used to help **develop cures** for diseases like diabetes and cancer and to enable faster, more accurate patient **diagnosis**.
- The European Union considers HPC a strategic investment priority. Yet there is a significant lack of professionals in the HPC domain, therefore formation in the field is becoming critical.

Opportunities



- While you are studying, collaboration with research groups/centers:
 - ARCO group
 - CAP group
 - VIRTUOS group
 - Barcelona Supercomputing Centre
- Professional opportunities:
 - Participate in the design of: future processors, supercomputers, mobile systems, robotic systems, control systems
 - Develop supercomputer applications and/or Improve applications performance: Weather prediction, Crash-tests, Bio-informatics, Genomics, Machine Learning, ...
 - Improve performance on other areas: after all a smartphone is not that different from supercomputer.
 - Develop/optimize application kernels.
 - Develop tools/compilers.

Exemplary Master Theses



- Student: Joel Sanchez Moreno
 - Advisors: Roger Espasa and Miquel Izquierdo
 - Title: Analysis and optimization of a debug post-silicon hardware architecture
 - Abstract: The goal of this thesis is to analyze the post-silicon validation hardware infrastructure implemented on multicore systems taking as an example Esperanto Technologies SoC, which has thousands of RISC-V processors and targets specific software applications. Then, based on the conclusions of the analysis, the project proposes a new post-silicon debug architecture that can fit on any System on-Chip without depending on its target application or complexity and that optimizes the options available on the market for multicore systems.
- Student: Marc Solé i Bonet
 - Advisors: Leonidas Kosmidis (BSC)
 - Title: *Hardware-software co-design for low-cost AI processing in space processors*
 - Abstract: In the recent years there has been an increasing interest in artificial intelligence (AI) and machine learning (ML). The advantages of such applications are widespread across many areas and have drawn the attention of different sectors, such as aerospace. However, these applications require much more performance than the one provided by space processors. In space the environment is not ideal for high-performance cutting-edge processors, due to radiation. For this reason, radiation hardened or radiation tolerant processors are required, which use older technologies and redundant logic, ...

Internships

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

Industrial Practices

Home » Companies » Industrial Practices

Industrial Practices ▼

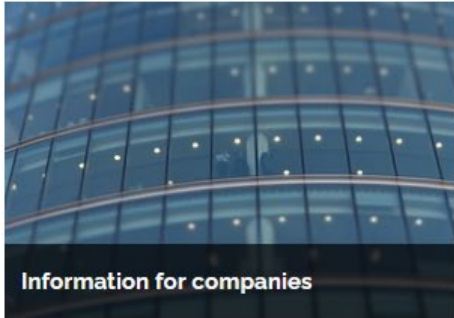
Offers list

Posting offers


Job Placements ▶

FIB Visions


Sponsorship ▶



Information for companies



Information for students



Regulations

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 between companies and FIB

- Curricular Practices:
 - Maximum of 900 hours (without accounting the Master Thesis)
 - For the master thesis, you may account 450 additional hours (i.e., for a total of 1350h)
 - Elective ECTS (minimum 6, maximum 12) [+ Master Thesis ECTS]
 - Master Thesis (Modality B –at a company- or D –at a foreign company-)
 - 30 hours → 1 ECTS

Professional Experience as elective ECTS (via work contract):

- Previous or during the master
- 1600 hours per 6 credit
 - Then, proportional

Mobility and Internationalisation

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

- Study abroad (one or two semesters)
 - Conditions (max ECTS): 30
 - You can request it once you have passed 30 ECTS
 - 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)
 - Institut Supérieur d'Informatique, de Modélisation et de leurs Applications (ISIMA)
- 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>

Mobility

[Home](#) » [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>

Mobility Calendar		
Home » Mobility » Outgoing » Mobility Calendar		
Mobility Calendar	Calls	Periods
Information Sessions	! Google Summer of Code	📅 04 Apr 22 - 19 Apr 22
Mobility experiences	! Place application for foreign universities: programa Erasmus+, Latin America, CINDA, Canada, Russia, Taiwan and China (2nd call)	📅 13 Sep 22 - 18 Sep 22
Study abroad ▶	✗ Place application for foreign universities: Erasmus+, Latin America, Russia, Taiwan, China and double degrees	📅 18 Feb 22 - 03 Mar 22
Internship abroad	✗ Application for a place at Spanish universities in the SICUE programme	📅 11 Feb 22 - 25 Feb 22
Other activities abroad	✗ Application for mobility in the US	📅 01 Dec 21 - 21 Jan 22
	✗ Application for a mobility place with the programme UNITECH	📅 17 Dec 21 - 18 Jan 22
	✗ Vulcanus programme	📅 02 Nov 21 - 14 Jan 22
	✗ Application for the National Institute of Informatics (NII) in Tokyo - 1st call	📅 13 Sep 21 - 20 Sep 21
	✗ iWeek a Paris	📅 17 Dec 19 - 28 Jan 20
	✗ Application for the National Institute of Informatics (NII) in Tokyo - 2nd call	📅 06 Sep 19 - 10 Oct 19

Opened ✓ To be open ! Closed ✗

Mobility and Internationalisation

- Information Sessions: <https://www.fib.upc.edu/en/mobility/outgoing/information-sessions>

Mobility information session 2021-2022

For mobility stays during the academic
year 2022-2023

1st semester

Wednesday, 17 November 2021

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: <https://meet.google.com/dwj-zygt-wkp>

- Morning session: **12:00 pm**



2nd semester

Wednesday, 16 February 2022

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: <https://meet.google.com/mip-zfid-fte>

- Morning session: **12:00 pm**



Still have doubts?

Contact us at:

rel.int@fib.upc.edu

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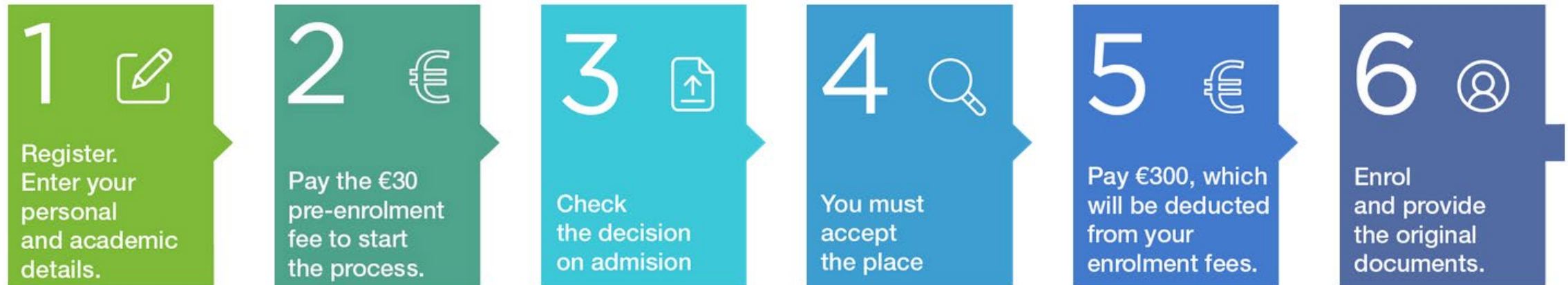
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Enrolment Procedure

Procedure

Interested in one of our masters? This is the procedure to follow

The admission process, step by step



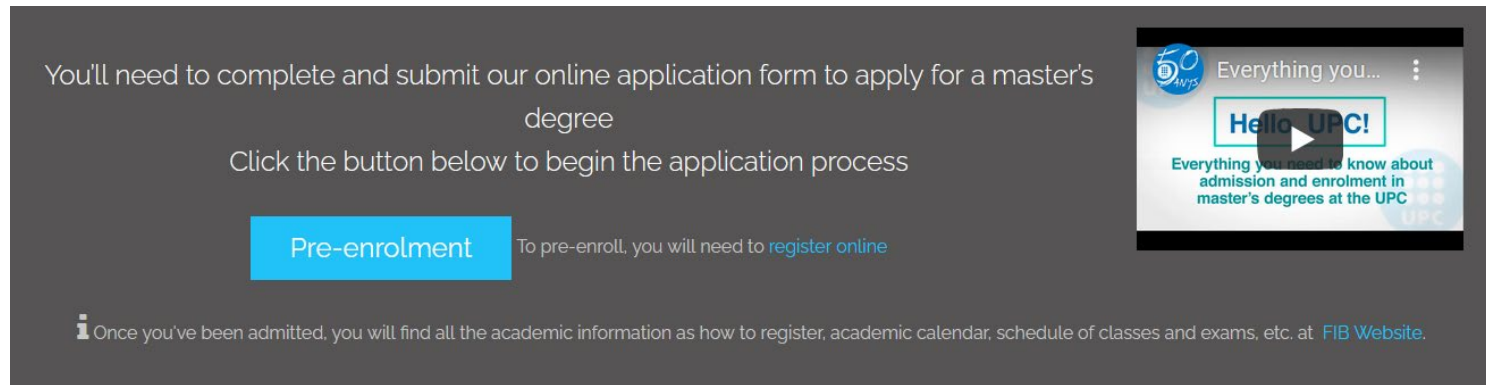
<https://www.upc.edu/en/masters/access-admission-enrolment>

Important Dates

- **Pre-enrolment**: From 1st March to 27th May 2022
- Two (three) **admission** periods:
 - ~~First period:~~
 - ~~Deadline to apply: 22nd April 2022~~
 - ~~Tentative admission notification: 29th April 2022~~
 - Second period:
 - Deadline to apply: 27th May 2022
 - Tentative admission notification: 3rd June 2022
 - *Third period:*
 - *Not guaranteed, only if seats available*
 - *Tentative deadline: 30th June*
 - *Tentative admission notification: 7th July*
- Check the **admission** criteria at: <https://masters.fib.upc.edu/>

Pre-enrolment

- Start the procedure from the masters.fib.upc.edu website. Look for your favourite master, scroll down and look for the **pre-enrolment** button as shown below



- To pre-enrol follow the instructions
 - Provide the required documentation to evaluate your admission
 - Pay 30,21€ (tax) – **Important:** the button to pay does not appear until you enter all required fields

You can learn more about the pre-enrolment process here:
<https://www.upc.edu/en/masters/access-admission-enrolment/pre-enrolment>

Admission

- Depending on your pre-enrolment data your application will be evaluated within the first or second period
- Evaluation outcome: **accept, reject, postpone (1st round) or waiting list (2nd round)**
 - First period:
 - Deadline to apply: 22nd April 2022
 - Tentative admission notification: **29th April 2022 (accept, postpone, reject)**
 - Second period:
 - Deadline to apply: 27th May 2022
 - Tentative admission notification: **3rd June 2022 (accept, waiting list, reject)**
- **Accepted** applications are contacted and informed about all relevant academic information as how to **register**, academic calendar, schedule of classes and exams, etc.
 - All this information is already available at [FIB Website](#)
 - Before registration, you must pay 300€ (tax) to guarantee your place (this money is later deduced from the registration cost)
- **Postponed** applications get their final decision during the second period
- **Waiting list** applications are contacted in order if drop outs happen
- **Rejected** applications are not accepted to follow that program

Prices

Prices 2021/22 for European Union applicants

- MIRI: 27,67€ / ECTS

Prices 2021/22 for Non-European Union applicants

- MIRI: 41,05€ / ECTS

***Note:** prices for 2022/2023 will be published in July. Once published, UPC list the prices here: <https://www.upc.edu/sga/ca/matricula/preus/PreusMaster>*

More Information

- General:
 - Information: info.masters@fib.upc.edu
 - Specific academic questions:
 - 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: Josep Llosa (josepll@ac.upc.edu)
- Websites:
 - MIRI-AC: <https://masters.fib.upc.edu/masters/miri-advanced-computing>
 - MIRI-CGVR: <https://masters.fib.upc.edu/masters/miri-computer-graphics-and-virtual-reality>
 - MIRI-CNDS: <https://masters.fib.upc.edu/masters/miri-computer-networks-and-distributed-systems>
 - MIRI-HPC: <https://masters.fib.upc.edu/masters/miri-high-performance-computing>
 - Academic calendars: <https://www.fib.upc.edu/en/studies/academic-management/academic-calendars>

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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

Accenture - Barcelona Digital Talent grants (2021-2022)	▼
Seidor grants (2021-2022)	▼
NTT DATA (everis) (2021-2022)	▼
"Nacho Navarro" grants (2021/2022)	▼
FIB Visiona - FIB grants (MEI, MIRI and MAI) - 2020-2021	▼
Fundació Catalunya-La Pedrera (MAI)	▼
Fundació Catalunya-La Pedrera (MIRI)	▼

Scholarships

ARCO Scholarships for MIRI Students	▼
CBA scholarships in AI for networking for MIRI Students	▼
inLab FIB	▼
McAfee-Medina-Corrala-Catalunya (McCA) scholarships for MIRI students	▼

Grants and Aids

- Becas del Ministerio de Educación 2022/23
 - If you plan to study a master, apply! (**even if you are not sure what and where**)
 - In September you will be asked to provide information of the master chosen
 - Period to apply: from 30th March to 12th May (way earlier than in previous years)
- Further details:
<https://www.upc.edu/sga/es/Becas/BecasEstudio/BecaMEyFP22>
- Support to the process (UPC video):
<https://www.youtube.com/watch?v=BsQoHywfrl4>

Important note: since this master is equivalent to an habilitant master, but not define as an habilitant one (in Computer Science this concept is not regulated) when opting to the “beca del ministerio” you must choose “no” to the option “máster habilitante”

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Social Life

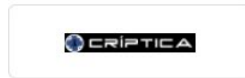
- FIB promotes social activities: <https://www.fib.upc.edu/en/fib/university-life>



Implica't



Viu la FIB



Social Life

WiDS: Women in Data Science Barcelona 2021

Women in Data Science is taking place in Barcelona next June 22nd.



FIB Visiona

Home » Companies » FIB Visiona

- Industrial Practices
- Job Placements
- FIB Visiona
- Sponsorship

The FIB Visiona is a set of activities (presentations, conferences, company stands, CV submissions, interviews, etc.) that are run by students with the participation of a large number of businesses. Companies are showing a growing interest in this initiative, as it enables them to make contacts with potential future employees. The same is true of students, who are thus afforded the opportunity of directly contacting some of the best companies in the informatics sector or other sectors such as telecommunications, services and consultancy

[FIB Visiona](#)

Last preparations of the WiDS – Women in Data Science, Barcelona 2021, do not miss it! It will be very
... where you can register without any cost and you can check the
... Secretary of State for Digital Strategy.

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FAQs

- **If I'm finishing my undergraduate studies this year, can I apply to a master?**

Of course! You can be admitted. You only need to finish on time your registration in September. Indeed, if you finalize your bachelor thesis in October you can yet be admitted in our masters. Contact us for more details.

- **Can I work and study at the same time?**

Of course! there are several opportunities to do extracurricular practices in companies that, in turn, may help you to obtain elective ECTS for some of our masters.

- **What about next academic course and covid-19?**

Our objective are 100% face-to-face lectures. If not possible due to public health recommendations, we will maximise face-to-face / hybrid lectures.

- **For new incoming students... what about enrolment?**

Registration has been online in the last courses. If you require to hand in some documentation you can do later before the lectures start.



FIB MASTERS

Do you have further questions?
Do not hesitate to contact us at
info.masters@fib.upc.edu