

# Bachelor's degree in Bioinformatics (interuniversity UPC-UB-UAB-UPF degree)

The **bachelor's degree in Bioinformatics**, which is taught entirely in English and coordinated by the Barcelona School of Informatics (FIB) of UPC and in which the UAB, the UB and the UPF participate, brings together mathematical skills, computational modelling and biological knowledge in an interdisciplinary focus that emphasises biomedical applications.

The main challenge faced by professionals in the sector is to speed up the conversion of new discoveries into better health, more effective healthcare and greater social and economic progress. Researchers and professionals in the biomedical field and other areas of the life sciences are often overloaded with large amounts of data obtained from a wide range of devices. The ability to process, visualise and analyse these large amounts of data provides enormous opportunities for improving our understanding of biology and make new advances in medicine, agriculture and the food industry.

#### **GENERAL DETAILS**

#### **Duration**

4 academic years

#### Study load

240 ECTS credits (including the bachelor's thesis). One credit is equivalent to a study load of 25-30 hours.

### **Delivery**

Face-to-face

## Language of instruction

English

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

#### Fees and grants

Approximate fees per academic year: €1,107 (€2,553 for non-EU residents). Consult the public fees system based on income (grants and payment options).

## Location

Barcelona School of Informatics (FIB) (**coordinating** school) Barcelona School of Telecommunications Engineering (ETSETB)

#### Official degree

Recorded in the Ministry of Education's degree register

#### **ADMISSION**

## **Places**

50

# Registration and enrolment

What are the requirements to enrol in a bachelor's degree course?

# Legalisation of foreign documents

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

## PROFESSIONAL OPPORTUNITIES

## **Professional opportunities**

The bachelor's degree in Bioinformatics trains the professionals who will act in an era in which research, development

and innovation are of increasing importance and who will be the driving force behind research institutions and innovative companies in the strategic sectors of medical technology, biotechnology, health and biomedicine in general. Given that bioinformatics is a multidisciplinary scientific and technological field, graduates in Bioinformatics have employment options in a range of areas.

- Biomedicine: integrating omics and clinical data to advance in personalised precision medicine.
- Biological research: all branches of biology are joining the big data revolution and require professionals who are interested in biology and have the capacity to analyse large quantities of data.
- Pharmacology: managing chemical, pharmacological, toxicological and clinical data during the process that leads to discovering, developing and using new medicines.
- Programming and development of computational tools and methods.
- Data analysis and artificial intelligence.
- Quality control.
- R&D departments at universities and businesses.
- Teaching and research in the field of bioinformatics.

### **ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS**

#### Academic calendar

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

### **Academic regulations**

Academic regulations for bachelor's degree courses at the UPC

## Language certification and credit recognition

Queries about language courses and certification

- Barcelona School of Informatics (FIB)
- Barcelona School of Telecommunications Engineering (ETSETB)

## **CURRICULUM**

April 2025. UPC. Universitat Politècnica de Catalunya · BarcelonaTech