



UNIVERSITAT DE
BARCELONA

Faculty of Physics

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Universitat de Barcelona

Nearly 600
years of history



UNIVERSITAT DE
BARCELONA

The UB is the main public university in Catalonia

The UB is the main university research center in Spain and one of the most important in Europe

The UB closely linked to the history of Barcelona and Catalonia



The **UB** combines the values of tradition with the fact that it is an innovative and excellent institution in the field of teaching.

The **UB** is an urban, open and cosmopolitan university, like the city of Barcelona itself.

62,252 students
73 bachelor's degrees
172 university master's degrees
47 doctoral programmes
372 master's programmes
178 postgraduate diplomas
6,328 lecturers and researchers



Faculty of Physics – Facts and figures



UNIVERSITAT DE
BARCELONA



≈ 1300 students of Physics and Engineering

≈ 280 master's degree students

≈ 200 doctoral students

≈ 272 professors in 4 departments

+ administrative and service staff



Física Aplicada

Física Aplicada i Enginyeria Física
Meteorologia
Òptica i Fotònica

Física de la Matèria Condensada

Física Estadística i Interdisciplinària
Física de Materials i Biofísica

Física Quàntica i Astrofísica

Astrofísica
Física Teòrica
Física de Partícules i Gravitació
Física Atòmica i Nuclear

Enginyeria Electrònica i Biomèdica

Física i Nanotecnologia de dispositius
Tecnologia Electrònica i de Comunicacions
Bioenginyeria



Faculty of Physics - Facilities



UNIVERSITAT DE
BARCELONA



55.000 m² of installations: classrooms, experimental labs, computer rooms, clean room, library, study rooms



Faculty of Physics - Educational offer



UNIVERSITAT DE
BARCELONA

OUR BACHELOR DEGREES

Physics

Catalan 70,3%, Spanish 22,1%, English 7,5%

Electronic Engineering and Telecommunications

Catalan 71,5%, Spanish 23,7%, English 4,8%

Double degree in Physics and Mathematics

administered by the Faculty of Mathematics



[Physics](#)



[Electronic Engineering
and
Telecommunications](#)



[Physics and
Mathematics](#)



Faculty of Physics BSDs



UNIVERSITAT DE
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ABOUT OUR **BACHELOR DEGREES**

Bachelor degrees in Spain are **4 years long – 240 ECTS**

Each year is structured around **2 semesters**

Fall term (September-December)

Spring term (February-May)

Most courses are **6 ECTS courses**

Final exams are **written exams**

Fall term exams period – January

Spring term exam period – June

Final BSD thesis project presentations – end of June

Erasmus students can register all our Bachelors courses, except

Microtechnology and Nanotechnology

We previously verify your academic background.

Double check the language for each group (M₁,M₂,T₁) at the corresponding webpages.

We require knowledge of the language of instruction

English B2

Spanish or Catalan A2 or B1/ Study online before you start your classes.



Useful info for our international students

Nomination and application

Student nominations for exchange studies at the Faculty of Physics must be sent by email to: rint-fis@ub.edu

Nomination & application deadlines:

Fall term & Annual stays: 15th June

Spring term: 15th November

Please provide us the following personal details of your nominated students:

Full Name

Email

Bachelor / Master Studies

Field of studies

Year of studies

Duration/Term of your stay

The students will receive an email from our part explaining our application instructions.

You must consider that

You will enroll for **over half of the ECTS credits** that you will take during your exchange period from BSD and MSD courses offered **at the Faculty of Physics**.

From here, you can additionally register complementary subjects that are taught in other faculties of the UB. The latter must be authorized by the responsible personnel in each case.

Our grading system

0,0 - 4,9: (SS) Fail

5,0 - 6,9: (AP) Pass

7,0 - 8,9: (NT) Merit

9,0 - 10: (EX) Excellent / (MH) Excellent with honors

PQ: Grade pending | NP: Absent



Faculty of Physics - Educational offer



UNIVERSITAT DE
BARCELONA

OUR MASTERS DEGREES

- *Astrophysics, Particle Physics and Cosmology**
- *Biomedical Engineering*
- *Meteorology*
- *Nanoscience and Nanotechnology**
- *Physics of Complex Systems and Biophysics**
- *Quantum Science and Technology**
- *Renewable and Sustainable Energy*
- *Other Masters not available for Erasmus incomers*
Photonics, Nuclear Physics – Erasmus Mundus
Semiconductor Engineering and Microelectronic design



[Masters offered
by the Faculty of
Physics](#)

* Fully offered in English



Faculty of Physics MSDs



UNIVERSITAT DE
BARCELONA

ABOUT OUR **MASTER DEGREES**

Our master's degrees are either **1 or 2 years long**

Each year is structured around **2 semesters**

Fall term (September-December)

Spring term (February-May)

The number of ECTS for each course's changes.

Final exams can be **written/oral exams**

Fall term exams period – January*

Spring term exam period – June*

Final MSD thesis project presentations – July*

* It might be subject to change

Erasmus students can also register our Master's courses if

- ✓ **180 ECTS passed when you come**
- ✓ **We get the OK from the master coordinator, who verifies your academic background.**

Double check the language for each course at the corresponding webpages.

We require knowledge of the **language of instruction**

English B2

Spanish or Catalan A2 or B1/ Study online before you start your classes.



Faculty of Physics - Internships offer

RESEARCH GROUPS

Astronomy and astrophysics
Bioelectronics and nanobioengineering
Thin films and surface engineering
Dosimetry and physics of radiation
Physics of biomolecules and small systems
Statistical Physics
Physics and engineering of amorphous and nanostructured materials
Nonlinear physics
Theoretical nuclear physics and many interacting bodies
Gravitation, particles and strings
Solar Energy Group
Quantum Computing Group
High Energy Experimental Physics Group
Physics and Computing in Complex Systems Group
High Energy Theoretical Physics Group
Magnetism group
Meteorology Group
Magnetic nanomaterials group
Radio frequency group
Wavefront Engineering Research Group
Physical Optics Research Group
Mathematical Physics Laboratory
Electronic Materials and Energy
Materials: structural and magnetic phase transitions
Micro-nanotechnologies and nanoscopies for electronic and photonic devices
Intelligent signal processing by sensor systems in bioengineering
Instrumentation and communications systems



UNIVERSITAT DE
BARCELONA

OUR DOCTORAL PROGRAMS

Physics

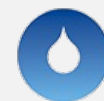
Biomedicine

Engineering and Applied Sciences

Nanosciences



Institut de Ciències del Cosmos
UNIVERSITAT DE BARCELONA



Institut de Recerca
de l'Aigua (IdRA)
UNIVERSITAT DE BARCELONA

[Further info](#)

