

**Round table**  
**EDUCATION**

# Outline

- **Education at UAB and UB (Bachelor)**
- **Exchange possibilities**
- **Previous years**
- **How to improve?**

# Education at UAB (Sciences Faculty)

## Degrees (4 courses and 240 ECTS)

- **Applied Statistics**
- **Chemistry**
- **Computational Mathematics and Data Analytics**
- **Environmental sciences**
- **Geology**
- **Mathematics**
- **Nanoscience and Nanotechnology**
- **Physics**

## Double degrees

- **Environmental sciences+Geology (5 courses and 342 ECTS)**
- **Physics+Mathematics (5 courses and 330 ECTS)**
- **Physics+Chemistry (5 courses and 343 ECTS)**



<https://www.uab.cat/web/estudiar/graus/graus/tots-els-graus-1345722992452.html>

# Education at UB (Physics, Chemistry)



UNIVERSITAT DE  
BARCELONA

## Degrees (4 courses and 240 ECTS)

- **Chemistry**
- **Chemistry engineering**
- **Physics**
- **Material engineering**
- **Telecommunication engineering**

## Double degrees

- **Physics+Mathematics (5 courses and 318 ECTS)**

<http://www.ub.edu/fisica/queoferim/en/index/grau.htm>

<https://www.ub.edu/portal/web/chemistry>

# Exchange possibilities

## ERASMUS + (till 2020-2021)



### → Students: Bachelor, Master, PhD

- **students enrolled in European universities**
- **from 3 months to a full academic year**
- **the recognition of studies will be made according to the Learning Agreement that the student has agreed with the coordinator of exchange before leaving**

### → Staff

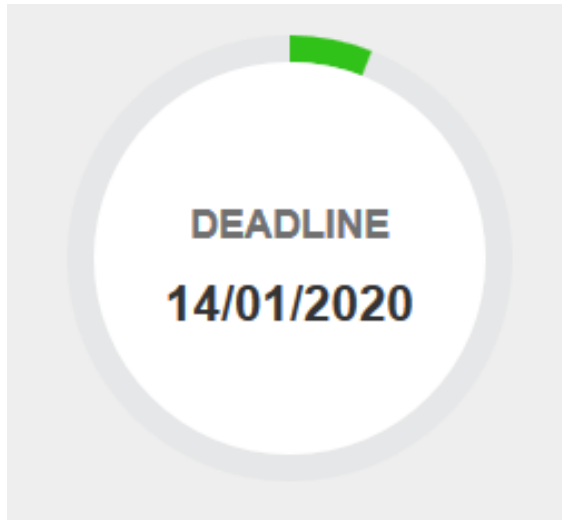
- **to spend time teaching at an education institution abroad**
- **from 2 days to 2 months but funding only for maximum 5 days**
- **minimum of 8 hours of teaching/week for periods between 2 and 5 days.**
- **combined with training, minimum of 4 hours of teaching/week**



# Exchange possibilities

## Innovative training networks

- **European Industrial doctorates**
- **European Joint doctorates**
- **European Training networks**



[https://ec.europa.eu/research/participants/data/ref/h2020/other/guides\\_for\\_applicants/h2020-guide-appl-msca-itn\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/other/guides_for_applicants/h2020-guide-appl-msca-itn_en.pdf)

# Exchange possibilities

## Cotutelle



Universitat Autònoma  
de Barcelona

### ➔ International PhD joint supervision

- **the PhD students will be assigned a thesis supervisor at each of the two centres subscribing to the agreement.**
- **Agreements may only be signed within the first year of research (the approximate time of processing the joint supervision is six months)**
- **Once the doctoral candidate has successfully defended the thesis written under cotutelle, he/she is entitled to two PhD degree certificates, one from each centre, as agreed by both institutions.**

<https://www.uab.cat/web/study/phds/cotutelle-international-joint-supervision-1345680701522.html>

# Previous years

**UAB**  
Universitat Autònoma  
de Barcelona



 UNIVERSITÉ  
**Grenoble  
Alpes**

**Bachelor**

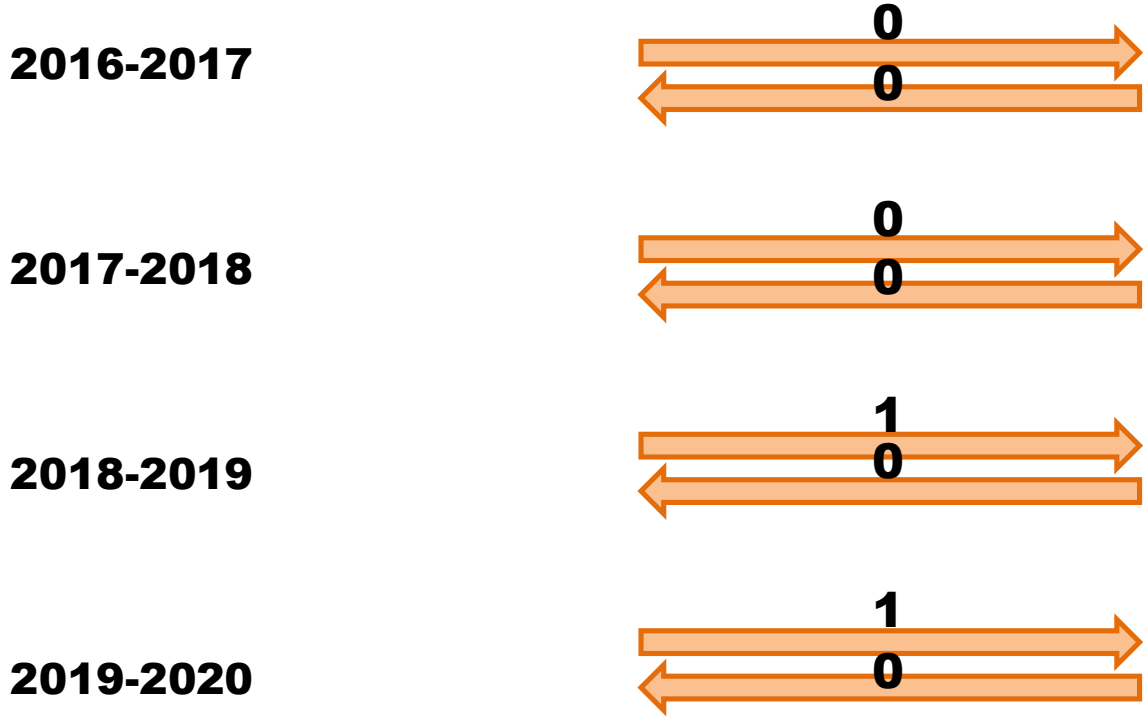


**Bachelor  
Master**

- **Since 2016/17 we have two Erasmus + agreements for Physics and Geology studies.**
- **All agreements are for 2 students with a semester stay (or in principle, 1 student with an annual stay).**
- **These two agreements are valid until the end of the academic year 2020-21.**
- **Currently, there are no teaching agreements for staff but they can be opened.**



# Previous years



**Both students in Geology**

# UB (Physics Faculty)



UNIVERSITAT DE  
BARCELONA



UNIVERSITÉ  
Grenoble  
Alpes

**Bachelor  
Master**



**Bachelor  
Master**

- **UB has one Erasmus + agreement for Physics but there has been no student exchanges in the last 3 years**

# How to improve?

## Possible reasons?

- **Language, English speaking countries are very demanded**
- **Geographical proximity**

## Possible solutions?

- **High quality specific programme**



**Ideas?**

**Comments?**

**Suggestions?**

**Experiences?**



# Education at UAB (Sciences Faculty)

## Masters (I)

- **Advanced Nanoscience and Nanotechnology**
- **Electrochemistry, Science and Technology**
- **Erasmus Mundus Enginyeria Fotònica, Nanofotònica i Biofotònica / European Master in Photonics Engineering, Nanophotonics and Biophotonics**
- **Erasmus Mundus in Environmental Studies - Cities and Sustainability**
- **Erasmus Mundus in Mathematical Modelling in Engineering: Theory, Numerics, Applications**
- **Geology and Geophysics of Reserves**
- **High Energy Physics, Astrophysics and Cosmology**



<https://www.uab.cat/web/estudiar/masters-i-postgraus/masters-oficials/tots-els-masters-1345722994212.html>

# Education at UAB (Sciences Faculty)

## Masters (II)

- **History of Science: Science, History and Society**
- **Industrial Chemistry and Introduction to Chemical Research**
- **Interdisciplinary Studies in Environmental, Economic and Social Sustainability**
- **Mineral Resources and Geological Hazards**
- **Modelling for Science and Engineering**
- **Paleobiology and Fossil Record**
- **Photonics**
- **Soil and Water Management**



<https://www.uab.cat/web/estudiar/masters-i-postgraus/masters-oficials/tots-els-masters-1345722994212.html>