

**Exchange university**

Universitat Politècnica de Catalunya

Degree programme

Media Technology (Computer Science MSc)

An exciting spring in Barcelona

Before departure

I always knew I wanted to go on an exchange term, to take advantage of the opportunity to explore and get to know new people. The reason Barcelona I chose Barcelona was because I knew I wanted to stay within the EU, and I wanted to learn Spanish better. So, I looked at all the universities in Spain and found interesting courses on UPC.

I didn't have that many expectations, I expected the student activities to be pretty much non-existent, but that turned out to be very wrong. There were activities for exchange students almost every day in the beginning, and every week the entire stay.

The preparations were very simple. I didn't need to take a Spanish course in advance because all my courses were in English. There was no need for any vaccination or visa.

Upon arrival

I arrived about a week before the studies. We had a small introduction to the school and Barcelona as a city during the enrolment day. After the enrollment, their student organization introduced themselves and their upcoming events and showed us around campus. There were two student organizations for Erasmus students called ESN and Erasmus. Read more about them and their events under the Leisure and Social Activities section.

Financials

I only had the Erasmus scholarship and normal CSN, which was enough to get by and afford to eat out and travel more than normally. Housing was a bit more expensive than I pay here in Stockholm but almost everything else was cheaper there. Food, drinks, metro and much more.

There was one fee to become an ESN member, unfortunately, I can't find the price for that now but it was not so much, and you also got a free tote bag and water bottle when becoming a member. Other than that there were no study-related fees.

A tip on saving money is just staying out of the most touristy areas. The restaurants on the main streets are quite expensive. Also, if you are under 30, get the T-jove metro card! It is a youth metro/bus card that lets you travel in all zones for three months for only 43 euros.

Accommodation

I got accommodation via a Facebook group “Swedes in Barcelona”, and found a nice place shared with two girls. I was a bit scared to be scammed, and have some friends who were scammed, so you should be careful. I met my Swedish roomie on Facetime and she had a tour of the apartment before I paid my deposit. I paid 5500 euros. My room was very small but the apartment was large with a lot of shared areas.

I think you can get some help through the university to find accommodation but it was a bit more expensive, and I didn't look much into it so I don't know how that works.

University and studies

The university is rather big, about 30,000 students, which is twice as much as KTH. It is a technical university and it offers pretty much everything technical, like KTH. I could have lectures anytime between 8-21, but I picked courses so I mostly had lectures 10-16. On a regular day I came to campus around 10, either went to a lecture or sat in the library. Had lunch in the cafeteria, I mostly brought my own lunch but they had pretty cheap lunch there. Then went back to the library before going home. The library was a great place to study, each school had its own library, so I only shared with other informatics students. It was never full and you always ran into other people you knew from classes.

I studied in English. In my school, all master courses were in English, and all Bachelor courses were in Spanish or Catalan, so I could only pick master courses. UPC offered language courses in only Catalán, but if you wanted to take a Spanish course from another university UPC could put it in my transcript. So, I took a Spanish course at another university, UOC.

Courses

Initially, I wanted to follow their Data Science master but I didn't meet the prerequisites, so I ended up mostly following a master called Master's degree in Innovation and Research in Informatics, with a specialization in Advanced computing. They were super hard on the prerequisites, I was declined because of some prerequisites that were stated as “recommended” on the website, which made me a bit angry. A lot of courses got full very quickly as well, so I recommend trying to sign up for courses as quickly as possible. The courses I ended up taking were:

1. **CC-MIRI - Computational Complexity.** This course was the toughest one I took in Barcelona because the concepts were very abstract and theoretical. We covered a lot of new complexity classes and explored complexity from randomized perspectives and using circuits. The assessment included 5 exercises and a final exam.
2. **ADS-MIRI – Advanced Data Structures.** This course was a lot of fun, with new and interesting data structures introduced each week. Every other week, we got to choose one of these structures to implement and evaluate its performance. I learned a lot, especially about how to evaluate algorithm performance. Instead of measuring execution time, we focused on more objective metrics like pointer updates, which was something new for me.
3. **AGT-MIRI – Algorithmic Game Theory.** Probably similar to SF2972. This course was an introduction to Game Theory, which is a way to mathematically model interactions between multiple participants. The goal is to design systems where, if each “player” acts rationally, the outcome is fair and each player can be satisfied with their decision. The course was interesting, and I learned a lot from it. It included weekly exercises, a midterm, and a final exam.
4. **ML-MDS – Machine Learning.** Similar to DD1420. The course covered all the fundamentals of machine learning, and I learned both the math behind basic machine learning algorithms and how to apply them practically through a project. The assessment consisted of a project, a midterm, and a final exam.

- 5. DEDS-MDS – Debates on ethics of data science.** In this course, we had a weekly debate for the first six weeks on various data science topics. For example, one topic might be “AI dangerously biases our decisions,” and we had to research the subject beforehand. On the day of the debate, we found out whether our team was the opposition or the proposition. We also got a chance to act as judges. I found the course too stressful for just 3 credits, but I did learn a lot about AI’s role in society.

I also took a Spanish course at UOC. It was completely remote, but three times I had to meet up over Zoom with another participant for a speaking exercise. The rest of the assessment involved writing and reading texts, as well as recording videos of yourself presenting something.

City and country

I actually expected to see a lot of traditional Spanish culture, but realized that Catalonia is not very traditionally Spanish. For example, they didn’t have the siesta. One thing that I did notice was that people were in general more social and could talk about anything. They also had festivals and carnivals out on the streets every other week, so it felt a bit more alive than Stockholm. Despite these differences I never experienced any culture shock.

Leisure and social activities

There were several student organizations. One called ESN, which I was quite active in. They hosted a lot of trips, bar evenings sightseeing, running and other cool events. It was via these events I met most of my friends.

There was also another organization called Erasmus which was a bit bigger, for all universities in Barcelona. This organization also had some cool trips, beer pong tournaments every week and free entrance to clubs every day.

We didn’t have any free sports facilities via the university, but there were groups that together tried to arrange sporting activities. I was in a beach volleyball group and a running group on WhatsApp.

Sustainability

I could have taken the train to Barcelona, but it would have been very expensive and take a very long time. So, I flew unfortunately both there and home. I don’t have many comments regarding sustainability, I live very similarly at home. I never had any physical textbooks, I had everything as e-books/pdf.

Other recommendations and observations

I recommend going to Montserrat and hiking up instead of taking the train. The hike was the most beautiful part, and on the top there is a cool monastery and some restaurants and cafés. Students also get free entrance into the monastery.