

**Exchange university**

Instituto Superior Técnico

**Degree programme**

Civilingenjör, Datateknik

## Experience of a lifetime with lots of sun, friends, activities, drinks and of course studies!

### Before departure

Ever since I started studying at KTH I wanted to go on an exchange. I have always been interested in experiencing new cultures, and putting myself in a completely new environment and seeing how I would handle it. I had tried applying for an exchange to Australia the fourth year but didn't get the spot, and since it was so close to the end of my education I began feeling a bit deflated about the idea. So when I got one of the exchange spots in Lisbon my expectations were not as high as it had previously been. But I still felt it was something I really had to try, and I can say now afterwards, I was not disappointed!

Portugal and Lisbon was an intriguing destination since I had been there for a couple of days previously so I had gotten a good first impression of the city. I was also looking for a place with a southern european/mediterranean vibe. Having nice weather and being able to do a lot of stuff that can't really be done back home in Stockholm was appealing.

There were few papers needed to prepare for the departure. There are basically only two things you need to fix before departure, the learning agreement, and a registration on one of Tecnico's services. The finer details of what was needed for the learning agreement, and when, was a bit unclear but contacting our exchange responsible to get clarifications was easy enough. If you are taking the Erasmus grant (which there's basically no reason not to), then you also need to fix a grant agreement. It is as easy as fixing the learning agreement so there should be no issues there.

### Upon arrival

I arrived three days before the introduction week started. There were no courses or anything during that week, only events and gatherings to get to learn the other Erasmus students there. The events were mostly at the end of the week. You got the option to sign up for these events the first introduction day. Most (if not all) of these events cost money but it was cheap for what you got. Some of the available events were going surfing, exploring Sintra (an old town outside of Lisbon), Portuguese dinner and party, basic tour of Lisbon, Portuguese drink tour. I would highly recommend trying to go to all of these, it gave me many opportunities to find new friends as well as getting a bit of a feeling of the city.

### Financials

My finances consisted of money I earned mostly during the summer, as well as the Erasmus grant. In total I believe my budget was around 70-80 000 SEK. A hefty part of it went to the housing. I rented a room in a corridor for 725 EUR per month, with some one-time administration fees to the service and the landlord which totaled 450 EUR. Add to it a security deposit of 300 EUR. This was very expensive compared to a lot of the other people I talked with. I lived within a ten minute walk to the university,

and the place was newly renovated, which I think is one of the reasons the price was so high. I heard of other people that paid around 500 EUR for basically the same living as me but in places about ten minutes away by subway.

In general, I would say that the living cost was roughly the same as in Sweden. Some things were pricier, some less pricey. Food and drinks were a bit lower (but not international candy and chips!), housing was about the same, and activities in general were quite a lot cheaper. If you are on a tight budget and want a good but relatively cheap lunch at university, I would recommend the modern cafeteria (not the old one!) where you could get this for about 5-6 EUR.

### **Accommodation**

There was basically no help from the university with the accommodations except them giving us suggestions on websites to use. They had some accommodations they could offer but they were so few that they felt they had to lottery them to students. So since there was almost only renting through private companies, the prices could be quite significant if you wanted to live close to the university. I got my accommodation through “Inlife Housing”, a website similar to AirBnB but for longer stays. There is also “Uniplaces” but they take a higher service fee and the rents on their website seem to be higher sometimes, even for the same apartment/room, so I would recommend Inlife Housing. Like I briefly mentioned earlier, I lived in a dorm where I rented one room out of 12. That might sound like a potential nightmare to you, but it worked out surprisingly well. I would actually recommend living with at least four or more people because then it becomes much easier to find different groups of people, if that is what you are after. As you will likely notice when you go on exchange, most people stay close to people from their own country or neighbouring countries. Potentially having flatmates from other countries could broaden the diversity of your social circle which can be quite fun when on an exchange. Anyways! The housing conditions of my dorm were high, except a few broken toilet seats, swelling doors (seems like the humidity affects the low quality doors down there!), and a hard bed. Considering I paid around 800 EUR per month, including extra fees, it was too expensive.

### **University and studies**

Tecnico has two campuses, Alameda and Taguspark. Alameda was quite small with around six main buildings, as well as Taguspark that only had one building. I would suggest trying to avoid courses in Taguspark, if possible, since it is located 30-40 minutes outside the city. Fortunately the university offers a shuttle there but it is still quite the ride. I tried to make sure all my classes were in Alameda, but the information on their website seems to be a bit inconsistent because I somehow ended up with a course in Taguspark, so be prepared for that potentially happening.

I would say the education structure of Tecnico was similar to KTH, i.e. having four periods, multiple courses at the same time, and similar evaluation methods. The biggest difference I noticed was that there were a lot more assignments with given deadlines, so there were always quite a lot of things to do that weren't necessarily that difficult. This could have however been because I only had one course with an actual exam, the others were graded based on assignments.

### **Courses**

I had five courses in total. Since the courses there are worth 6 ECTS, one period you had to have three courses at the same time. The courses were: Large Scale Systems Engineering (ESLE), Management and Administration of It Infrastructures and Services (AGI), Information Visualization (VI), Computer Graphics for Games (CGJ), User-Centered Design and Evaluation (CCU).

ESLE consisted of a project and an exam. There was also an optional presentation of a scientific paper. In the project one had to create a group of three and choose a large scale system (we chose the database MongoDB) that one should evaluate based on concepts and ideas presented in the lectures. It was a very practical course that was mostly based around the project. If you participated in the project, you could basically pass the exam without much extra studying. The course gave a good insight into the complexity of larger systems and their intricacies.

AGI was just a project where the focus was to implement virtualization of It infrastructures including provisioning and deployment of these infrastructures, mostly on the cloud. This meant software such as Vagrant and Terraform was very prevalent in the development. It was interesting to get an

understanding of the infrastructure-as-code process, but this field/area is not something I could see myself working with in the future.

VI was quite an easy course but fun and informative since information visualisation is prevalent in so many fields. Understanding how to present it in an effective way and how we as humans can be easily manipulated by how it is presented is useful knowledge. The course consisted of small quizzes every other week to test one's knowledge, and a big project where you with a group of two people were to pick a dataset to visualise. The course was easy but full with small assignments and deadlines which could get a bit overwhelming if not planned well.

CGJ is the course I have the hardest time evaluating since I was not present at any of the lectures except the first one. The course contained labs and a project where the first labs were done in a group of two. I felt the instructions of the labs and project were a bit unclear but this might have been made clear if I was present at the lectures so I can't really blame the course for this. Otherwise it was quite a fun course where we got to implement models and functionalities in 2D and 3D space with the help of OpenGL.

CCU gave great insight into how one should engage a group of people in order to find out about their issues and how to make sure the chosen issue/issues steer the project's decision making. Since it was such a project-focused course it consisted only of one big project that would be presented at the end of the course. For that year, the Santander bank sponsored the course and gave a theme to investigate. The focus was the improvement of peoples' financial literacy. The groups with the best projects got to present to Santander and possibly get funding for the project and thesis work related to it which was cool. It was however a course that could at times feel unclear and ambiguous when it came to its instructions and goals. My group often had to contact and double check with our mentor or lecturer what was the correct interpretation. It was annoying but worked out well in the end.

### **City and country**

The country and the city has a much more relaxed feeling compared to Stockholm. The classic southern European feeling you probably have heard of is very much present in Portugal. There was no real culture shock since Portugal, as a European country, is relatively similar to Sweden. Also, since you mostly hang out with other exchange students, the potential culture shock is even less. Lisbon is the same size as Stockholm, population wise, but feels more like a smaller city such as Gothenburg. One of the things I noticed in Lisbon was that people are generally hanging out more in the city compared to Stockholm. They can socialise at cafés until 11 or 12 in the evening, even on regular weekdays.

### **Leisure and social activities**

In my spare time I often hung out with my flatmates, either going out for drinks and dinner, playing padel, or doing other activities and trips. Every week the university seemed to have at least one hangout close to the university's sports area where people gathered to drink beer and sometimes barbeque. In the beginning of the semester they also had a big music festival which was quite cool. Other universities also have similar events so if you are into festivals there are plenty for you. In terms of sports activities, it was possible to join different sports teams or one could simply book a court or field for you and your friends to use. Sport activities could be very cheap as a student so the price was not an issue. As a student you also get discounts for cultural activities such as going to museums if you are into such things.

As mentioned, I did a few trips when I was there. Most were outside of Lisbon which I would highly encourage if you have the budget. Taking a weekend or long weekend down to Algarve is a must if you enjoy beaches, surfing or simply enjoy the classic mediterranean (almost) feeling. I would also recommend taking a trip to Porto, a much different city compared to Lisbon. Feels like an older city with cosy fishing village influences. Unfortunately the weather was atrocious when we went there (pouring rain the majority of our weekend), but if you go in September or October you will probably have better luck. Going to Nazaré to see the big waves and surfers is also one of my recommendations. Might be a bit difficult to time the trip well with the wave conditions. If you go there on a day with bad conditions it can be quite underwhelming, but if you stay informed it is quite easy to just rent a car with a couple of friends (cheaper than taking a bus) and drive there in 1.5-2 hours. The best option would be to time it with one of the surf competitions.

**Sustainability**

Sustainability wise there wasn't anything special about the city or the university. It was easy to take the metro around town and to the university (buses were very unreliable). Getting a monthly metro/bus card was a big hassle, especially in the beginning since all new students wanted one. I had to queue for around three hours just to submit a form for the card, then I had to queue another hour when it was time to pick it up. Very outdated system compared to Stockholm where you can simply buy the card in a convenience store and charge it in a maximum of ten minutes. Taking taxi services such as Bolt and Uber was very cheap there which couldn't have been sustainable. It was possible to go around in the city on a 15 minute ride for about 3-4 euros which feels kind of insane.