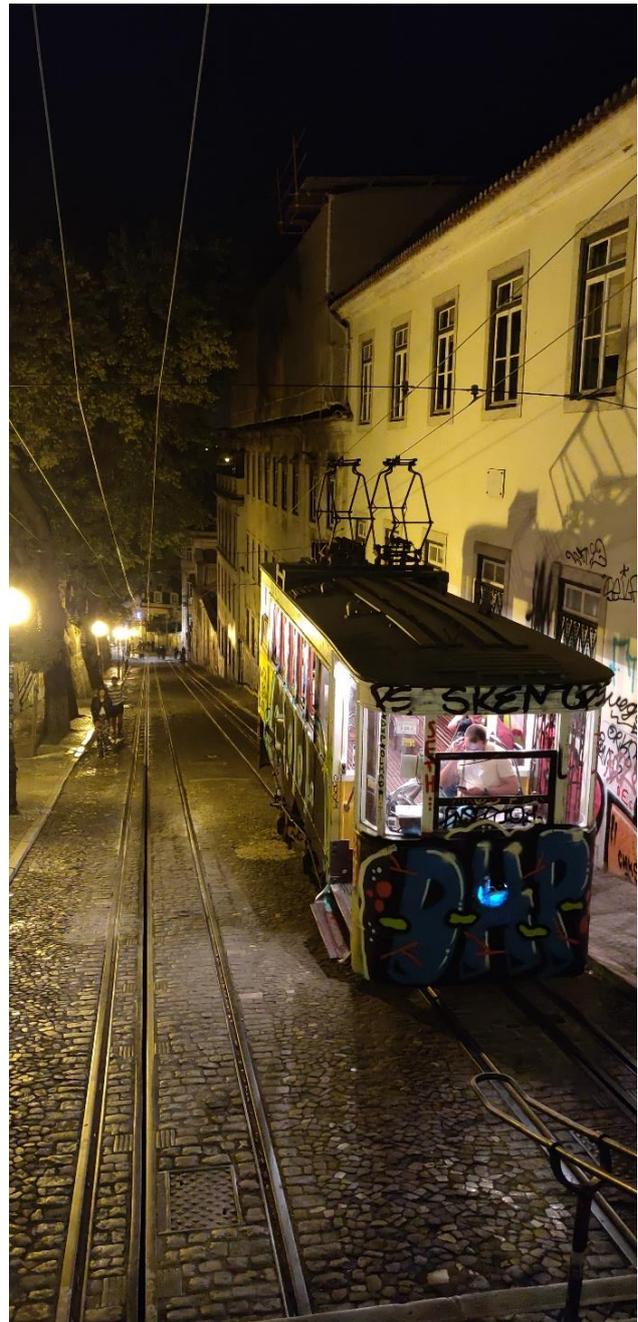


I love Lisbon!

Before departure

I applied to exchange studies in Portugal to discover a new culture. For me, this was simply the most exciting destination in Europe. The university, Instituto Superior Técnico (IST) also provided courses that I found interesting and which overlapped with my programme at Kungliga Tekniska Högskolan (KTH). Moreover, I find the Portuguese language very peculiar and unique. I love the sound of it, and I wanted to learn it. So, before departure, when KTH (my home university) organized a meeting with Portuguese exchange students, I asked about Portuguese music artists to start listening to the language. I had tried out Duolingo, a popular language app, but it only offers Brazilian Portuguese. Importantly, I also asked how to look for accommodation. From them I learned about the Facebook groups that I used to look for a place to live. I managed to find a promising place. However, I was not comfortable with signing a long-term contract with 3-month cancellation notice for a place that I had not seen first-hand. So, I only booked a hostel for two weeks in the centre of Lisbon with the idea to find accommodation during this period. This is more risky and costly, but in the end, life in the hostel was amazing even though it is not the best place for a good night's sleep. My expectations of the exchange were to be very alone, but I experienced the opposite. I also knew that the country has a very long and rich history, which I was looking forward to learning about.

Right: The steep hills of Lisbon are surmountable with the help of the iconic "electrico" carts, which I personally never tried even once. This picture is taken on top of Bairro Alto, where I initially stayed and the place that you are guaranteed to visit (more than a few times).



Upon arrival

The arrival is immensely exciting; every next step is into the unknown. I arrived two weeks before school start. If you stay in a hostel, you'll have plenty of fun activities and many people to hang out with. Then, during the first weeks of school, you are supposed to check out the courses you have

selected and make sure that you are comfortable with your choices and the schedule. You will receive feedback from the exchange coordinator on the spot and they will help you to make changes to your study plan if you want to change courses. It is common to make changes, and by communicating with other students about their courses and going to some lectures of the alternatives you've had in mind you'll figure out a nice study plan. At the same time, the students' association organized many welcoming events during the first two weeks. They take care that you get the essential information about the city, the school, and the events. They are really welcoming and kind. In general, the start of the semester at IST is amazing and highly celebrated, culminating in a huge party with several concert stages built on the university grounds.

Also, the local Erasmus office (Erasmus Life Lisboa, ELL) organizes social events ("speed dating", dinners, parties, beach days, surfing, sightseeing tours, even travelling to nearby towns) every single day for the whole semester – they are really active in Lisbon! Every day you meet new, exciting people, and it was almost overwhelming. Find their monthly schedules on their Instagram (<https://www.instagram.com/erasmuslifelisboa/?hl=en>).

Financials

For financial freedom in Lisbon, I applied for the Swedish CSN support, as well as study loan. This amounted to roughly 1000€, which I received monthly. On top of that, I applied for Erasmus support, 80% of which I received in the beginning of the semester. This meant that I did not have to think too much about money. However, I recommend living economically, for example by **cooking often**, and saving for travelling throughout Portugal. I do not recall any mandatory fees. Possibly, you'll pay ca. 10€ for a student card. Student union membership and such things are all voluntary. The larger parties organized for the exchange students cost money, 10-20€, and many of the ELL events also cost, but are fairly cheap. The metro ticket is not cheap, however: 40€ for larger metropolitan area (covering nearby towns like Belem, Sintra, Caparica and even Setúbal). The inner-city ticket is 30€ but if you'll visit beaches in Caparica even twice, then it's worth buying the metropolitan ticket. It's good to live walking distance from school to save money by not relying on metro later during the semester. There are a lot of offers for accommodation very close to school so that should not be a problem.

Accommodation

The price of accommodation in Lisbon is very similar to prices in Stockholm. I shared flat with 2 other people and paid 390€ for my room. I found this deal on Facebook via one group: <https://www.facebook.com/groups/NOMADXLISBONACCOMODATIONS/>. I chose this channel, because I wanted to live with local Portuguese people to learn about their culture and language. This way I was introduced to a lot of people other than students. There are easier ways of finding accommodation, like on some "Erasmus" websites, via which you are almost guaranteed to stay with other students. This would likely be a slightly different experience, but also a very good one. There are a lot of alternatives, so I'd start looking a few months before departure. Already a month before the start of the semester, the offers are often taken within an hour after posting.

I stayed in the part of town called Anjos, a neighbourhood that I really loved, and many students will find accommodation there. This place feels more run down and hipster than some fancier neighbourhoods like Saldanha which is very closer to the university. Anjos is rich with culture, with venues to visit every day. Good examples are Anjos70, and Crew Hassan for live music and many different events (visit their Instagram). That being said, a girl would not always feel safe walking some of the streets here alone at night – it's not Södermalm, Stockholm. I can give more info on neighbourhoods of Lisbon, but the bottom line is that the city is amazing and it's hard to go wrong with finding a place to live.

University and studies

I took courses in biotechnology at Instituto Superior Técnico, which is part of University of Lisbon. Biotechnology is a master's programme there, but offers a nice variety of essential courses, most of

which overlap with Medicinal Biotech master's programme at KTH. Additionally, you will find courses not offered at KTH, like stem cell biology (part of tissue engineering). IST is very advanced in that regard, as many universities around Europe are limited to bioengineering, which is more aligned with Industrial Biotechnology master's at KTH. Bioengineering is an older and much larger, 5-year programme at IST, so industrial biotech students will not have a problem finding many relevant courses. However, I would not replace any important wet-lab courses at KTH with something at IST. Due to much greater funding, KTH offers much better opportunities in that regard. Meanwhile, I think it's important to note that IST offers great entrepreneurship courses, which are entirely project based, and very different from KTH. These give a great perspective for technology transfer into business.

Courses

In total, I took 63 credits during my exchange year at IST. This involved 4 theoretical courses during autumn semester and the 30-credit master's thesis in Spring semester. I chose my courses according to personal interest and by ensuring a good fit with KTH study plan. I selected courses from the IST webpage: <https://fenix.tecnico.ulisboa.pt/cursos/mbiotec>. My courses were the following:

Entrepreneurship in Bioengineering: attending this course was arguably the most fun I've had in school. It's group project where an idea is developed into a solid business plan. It involves 5 presentations (which we split between group members) covering the different stages of the planning and the final work is a document of the whole business plan. All elements are graded, and the final grade is a combination of these (it also considers the commitment and development of the group). The course covers the essential parts of a business plan: the problem and the idea formulation, technological solution, market research, stakeholder analysis, competitive analysis, economic feasibility, and sales forecast, etc. The course focuses on making the plan as attractive as possible for investors, thereby teaching you to do a perfect elevator pitch, and develops your presentation skills. As such, the course encourages competition, rewards ambition, and truly brings out a business-oriented mindset for technology transfer. The best projects are selected in class to go on to a university-wide competition with a jury of local entrepreneurs and venture capitalists. My group won the runner-up prize with a plan for a cell-based fish product, even though we started with just an idea, and all the while having fun. I strongly recommend an entrepreneurship course to anyone who is going to IST for exchange - every program has its own entrepreneurship course.

Stem Cell Bioengineering: This is a very interesting and well put together course that teaches you the basics of stem cell biology including growth and differentiation, emphasizing cultivation techniques, and covers the history and the state-of-the-art production and applications in medicine. The course elements include two abstract writing tasks in class (in a small group), a presentation of a scientific article (in pairs), and a 10-page monography. I highly recommend the course for those who haven't taken classes about stem cell biology before. The teachers are very passionate, and they have exciting guest lecturers also.

Medicinal Chemistry: This is a pharmacology course, covering the design of small molecule drugs and aspects such as biological activity and physicochemical properties. It teaches you all the important parameters related to drug efficacy and efficiency, how these are related to the chemical properties of the drug and the mechanisms involved in e.g. drug absorption and metabolism. The course involves a presentation of a scientific article about drug design and a written exam. It is very informative and covers the most important aspects of small drug design.

Project in Biotechnology: This is a large, 15-credit project course that serves as an introduction to the master's thesis. The work done in this course will depend on the plan made with the supervisor and the student. The work that is submitted in the end is a 15-page monograph and a 10-page practical report. The work is presented in a 20-minute power-point presentation. **What exchange student will not know without specifically asking the course responsible or local students, is that you are supposed to choose a project in during summer. In June, a list of available projects is**

released on IST webpage. You should browse this list and decide as early as possible to avoid confusion upon arrival. The project must not necessarily be done at IST, however. If you don't find anything of interest in the provided list, it is possible to look for other projects by yourself by contacting institutions and people whose work might interest you. For example, I did my project in Caparica, FCT, outside of Lisbon and I found out that I need to find a project when school started. It took me one month to find what I liked, and I consider myself lucky. However, what I had found was a topic and a supervisor, and I had to figure out what work I will do in the project and the subsequent thesis. Therefore, it is easier for you to choose from existing projects (the IST list) and if you look for something much earlier during the summer. Overall, this course requires the ability to work and plan independently.

Master's Thesis in Biotechnology: This course will of course depend on what project you find, and who your supervisors will be. Not even the local students will always know what they're getting into. Important to note here is that you will have to **submit and defend your thesis at IST** if you do it during your exchange there. That's not a problem, I think. You will have to submit the thesis in the right format that is required at IST. This is not a major obstacle, however, but simply some formalities that are easily taken care of. I defended my thesis at KTH first and then at IST (both via Zoom due the circumstances) without a problem. Another important note is that the thesis project is much longer at IST than the 20-week program at KTH. Local students present their work in the end of November, in contrast to end of May at KTH. This was not a problem for me personally, as my work was purely computational. However, I can imagine that projects with wet labs are adjusted to the longer time frame, and it might be difficult to obtain enough results in a short amount of time. In general, the labs at IST are less funded than at KTH, so in this regard, I would recommend using the opportunities at KTH.

I also took an intensive course in Portuguese, A1.1. It cost 75€ and I think it was worth it. The classes were 7-9pm from Monday to Thursday, during a month or so. During corona lockdown the whole thing was online, but I still enjoyed it a lot. Our teacher was amazing, and I've heard only good things about the other teachers as well.

City and country

Be prepared to climb hills in Lisbon! The city is built on 7 of them, so wherever you're headed you probably have to climb at least two. IST is also on top of a hill, so no matter from which direction you approach, you'll be sweaty once you arrive! This could be the reason to why everybody in Lisbon is thin! Also, these hills provide amazing views over this beautiful historic city. One of my favourite past time activities was simply walking, discovering its streets and parks, and admiring the architecture.

Regarding culture shock, I found it really funny that the Portuguese combine rice and fries as the side to many of their dishes. It's the norm, and in the canteen, I always had to specify if I wanted just one or the other. Also, the standard beer glasses are really tiny, only 20cl! On a more serious note, the daily active hours are shifted by one hour. Work usually starts at 9am and finished at 6pm. I would never suggest a meeting at 8am to somebody in Portugal. Also, the Portuguese usually eat dinner at 8pm at the earliest and dinners with family and friends are much longer than in Sweden. People hang out after eating and spend time together. For example, on a Friday, when somebody says that they'll come out after dinner, this means they'll come out by midnight. Most places close at 4am, but people tend to hang out all night on the streets. Also, 4am is when the locals usually go to the club.

Although there is plenty to explore in Lisbon and the surrounding areas, it's easy to travel further by train and bus. The best way to discover the country is by car, however. Go with a friend who has a car or rent a car. Visiting all the towns and villages on the way to some farther destination is a good idea. You'll discover beautiful picturesque streets and squares, and most towns have their own pastries (I tried as many as I possibly could). Personally, I visited Sintra, Porto by train, drove the car to Algarve, Faro, and

did five days long road trip through the Vicentina Coast, starting from Setúbal and the surrounding areas. Go everywhere!

Overall, it was surprising to me how kind and welcoming the Portuguese people are!

Leisure and social activities

The city sprawls with life every day and night. During the night, you'll meet up with friends and often go downtown or to a vista to grab some beers or drinks. It's a great city to just hang out on the street by different bars and talk all night (I mean until the morning). Even more casually, I would often just meet up with some friends to enjoy the sunset on one of the hilltops of Lisbon. Often, we'd organize dinners, and it is very common for the locals to dine out with friends also.

The city offers many clubs with concerts occurring every night, and there is a great variety of music styles to choose from between venues. For example, the city has a strong cultural influence and artistic presence from Africa and south America, which you should explore by visiting different places. Regarding concerts and events, the best guides aren't the student union and the Erasmus office, but the local students – so go make friends! There are many music festivals occurring, and the city has a great drum and base scene, which I personally enjoyed a lot.

Lisbon offers very interesting museums and my favourite was the Maritime Museum in Belém. It tells the story of how Portugal started conquering open seas and expanded as an empire in the age of the discoveries. It also covers the maritime history up to modern day. To me, the most fascinating were the technological innovations that were on display, the ingenuity that made the excursions to India possible. I also recommend learning about Portugal's modern history. It's a country with a very tumultuous past, especially the period of the first Portuguese republic. It's also interesting to learn what an impact Salazar's rule has had on the country and on the people. Obviously, these are things you learn from the people, so please hang out with the local students! Although there is naturally a divide between the Erasmus and the local students, this is mostly because Erasmus people tend to stick together. I encourage you to talk to locals and you'll realize it's very easy to make friends with them. They are awesome people!

On my walks, I'd often revisit Graça and Alfama, the older parts of the city. To hear the history of the places, I strongly recommend going on the guided tours. The guides are really professional and share a lot of interesting stories. When showing my friends and family around town later on, I would often tell them these stories.

Other recommendations and observations

I've had problems getting a transcript of records from IST. After one month of completing my courses at IST, I still have not received it after continued attempts to get contact with the right people there. Before leaving, I recommend talking things through with the local coordinator at IST regarding all the necessary paperwork for Erasmus+ and your home institution. It's more difficult to solve problems via email later.

If you're staying throughout the Winter, I recommend bringing warm clothes and slippers. The houses are all built for warm weather so it's cold indoors during the winter.

For more photos and information, I'm gladly willing to share. Simply contact me by email: joonasa@kth.se