

**EXCHANGE REPORT****Name**

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Year and semester for exchange

Autumn 2024

Exchange university

Universidad de Chile

Degree programme

Applied and Computational Mathematics

Chile, the country that has it all

Before departure

After getting to know Europe quite well, I wanted to experience something different, and going on an exchange seemed like a great opportunity. So, I decided to go to South America. I was undecided between Mexico, Colombia, and Chile, but in the end, I opted for Chile because of its incredible diversity—you have the beautiful Patagonia with its glaciers in the south and Atacama, the world's driest desert and the best place in the earth for stargazing, in the north.

I had to take a Spanish test at KTH since a B2 level was required. In addition, I needed to apply for a student visa because my passport only allowed me to stay in Chile for 90 days. Applying for the visa takes quite some time and requires several documents so take your time in doing this.

Upon arrival

I arrived one week before classes started, and I think it was the right decision. Even though the city is huge, you can find your way around quite easily since things mostly work the same as in Europe. This week gave my friends and me the chance to explore the city and find a place to live.

We had a welcome session hosted by our “buddies,” where all the international students got to know each other, and everything we needed to know about the university was explained.

Financials

From KTH, I only received an 8000 SEK scholarship, which was enough to cover my flight. In terms of monthly expenses, Chile is considerably cheaper than Sweden—I would say I spent around 70% of what I was spending in Sweden. The supermarkets have almost everything you need at reasonable prices. However, I recommend going to a local market or to “La Vega” if you want fresh fruit, vegetables, or fish (I haven't seen fish in any of the supermarkets). These local markets offer better prices and quality, so they are definitely worth checking out.

When it comes to eating out, there are many places around the university where you can get a lunch menu (soup + dish + drink) for around 60 SEK. Additionally, the university canteen charges 40 SEK for the menu, and it's quite decent. If you want to go to a better restaurant expect to pay around 200SEK per person.

Accommodation

I'd say there are two main options: LivinnX and everything else. LivinnX is a student residence primarily for international students, offering excellent amenities such as a pool table, gym, cinema room, swimming pool, etc., but it's also the most expensive option.

If that's not for you, you can search Facebook groups or MercadoLibre (a Chilean website), as there are plenty of rooms for rent across the city. These are typically shared apartments with other international students.

As for areas to live in, I'd recommend Providencia and Ñuñoa. I shared an apartment with some friends near the Irarrázaval metro station, and each of us spent around 3000 SEK per month on rent. There was also a direct bus from our house to the university, which took only 20 minutes.

University and studies

The exchange university is Universidad de Chile, but specifically, you will be studying at FCFM (Faculty of Physical and Mathematical Sciences), which has its own campus. All the engineering programs are held there. The university facilities are excellent, and the teaching quality is on par with KTH.

I'd say there are two major differences: more frequent and lengthy evaluations. It was rare for me to have a week without a test or a project to submit. Additionally, in the Mathematics department specifically, all my tests lasted around four hours (yes, tests—not exams).

Here's what my weekly schedule looked like:

- Monday: 12:00–13:30, 16:00–20:00
- Tuesday: 10:00–18:00
- Wednesday: 14:30–18:00
- Thursday: 10:00–18:00
- Friday: 12:00–13:30, 16:00–17:30

All the classes were in Spanish, but I was allowed to write projects and tests in English, and some presentations could also be done in English.

The university has amazing sports facilities, including a swimming pool, basketball court, volleyball court, squash court, a small football field, a tennis court, and even a free gym for all students.



Courses

I took mostly courses in Mathematics, in general I'd say they were a bit harder than KTH. Anyway, here is a breakdown for you.

Algoritmos Combinatoriales - MA3705 – 6 ECTS

This is the university introductory course to Algorithms and Graph Theory. In the beginning it can be quite slow if you are already familiar with graphs but then as it moves on it becomes quite interesting and you learn about shortest path algorithms, flow algorithms, matchings algorithms and also about matroids! If you are into that type of stuff I would highly recommend it. The evaluation consists of 3 tests.

Control Óptimo: Teoría y Laboratorio - MA4703 – 9 ECTS

I was not particularly interested in this one, I just took it because it matched the blank space in my schedule and the credits I needed. In terms of content this is very similar to the corresponding course at KTH. Every other week you have to hand in laboratory work (which is basically a normal project), you also have a final project to hand in at the end of the semester and 2 tests. The professors (both the lecture professor and exercise sessions professor) were very good. If this is your thing, go for it, it will require some work, but you will learn a lot.

Simulación Estocástica: Teoría y Laboratorio - MA4402 – 6 ECTS

I am not sure how to describe this course, maybe chaotic is the right word. Let me just begin by saying this: every lecture the professor would toss two coins, and if both landed heads, there would be a 5 minute exercise for evaluation. These only amounted for 10% of your grade, but if you have a negative average in them you fail the course (to be fair if you show up you will be fine, they were not that hard). About the rest, the classes were very fast and a lot of the times hard to follow. Like in the previous one you also had laboratory work every other week and a final project to hand in, no tests tho! If you are comfortable with probability theory, functional analysis and need a little excitement in your life, go for it!

Teoría de Grafos - MA5505 – 6 ECTS

This was the best course I took. It's an advanced Graph Theory course where you learn about matchings, connectivity, colouring and planarity, among some other stuff. The classes were in general very good and rigorous (Theorem, Proof, Theorem, Proof...). It also requires some work, every other week you have a 1h30 class exercise for evaluation and on top of that 3 other tests (which take around 4 hours each). So yeah, that is quite a lot, but it was definitely worth it.

Introducción a la Lengua y Cultura Mapuche - EH2518 – 3 ECTS

This university advises you against taking more than 4 technical courses, so I felt like this course was a good way to follow their advice and get to know a little bit of the culture of the Mapuche (a large people in Chile). The professor was the nicest person and the classes were overall easy to follow. You learn the basics of the Mapudungun (their language) and sometimes you can enjoy some stories told by the professor which allow you to gain some insight into their culture. The evaluation consisted of 2 tests and 2 oral evaluations, but they were very accessible.

City and country

Santiago is a quite safe city. You need to take care at night in certain areas but during the day you don't have to worry. You will also find most of the commodities you have in Stockholm. However, I would say is that it is quite noisy and a bit dirty, but it's not the end of the world. In terms of tourism there is not a lot to see but you can find different activities every week. When it comes to the people, they may

not be super nice at first but once you start talking to them, they all are quite fascinated to have someone from another continent visiting and you will be very well received. In these 6 months I have made very good friends that I am sure I will keep in touch from now on. I am from Portugal, so I would say my culture is quite similar to theirs, but if you are from somewhere else don't worry, everyone will treat you like a close friend after you talk to them 1 or 2 times.

The rest of Chile is a different story, the people are usually even nicer than in Santiago, so I recommend just visiting some random small towns to get a better grasp on the Chilean culture outside of the big cities.

Leisure and social activities

The group that organized the welcoming session also organized several other activities. There were weekly lunches with the other international students, some tours in Santiago and even one 2h hours away to Baños Morales, some amazing thermal waters in the Andes. Also, there is another entity, Santiago Exchange that organized a lot of trips where you can get to meet international students from other universities in Santiago. I went with them to Valparaíso and it was a lot of fun.

In my spare time I mostly played padel and travelled. I got to see a lot of Chile like the artistic city of Valparaíso which has phenomenal street art and a lot of downhill and uphill steep streets, its neighbour town, Viña del Mar, which has a cool casino and some fantastic dunes (go to Dunas de Concon for one of the best sunsets), also Puerto Varas and Los Lagos region, super beautiful nature, make sure you don't miss Saltos de Petrohue, super underrated and lastly the famous Patagonia.

Patagonia was not only the highlight of Chile but the highlight of my whole stay in South America. The scenery is truly breathtaking and if you have the time there are fantastic trekking opportunities around Torres del Paine Natural Park, the best natural park I have ever been to.

At the end of our studies me and my friends also got to travel around Brazil and Argentina. The highlights were definitely Buenos Aires, Cataras do Iguazú and the New Year's Eve in Rio de Janeiro. Both countries are fantastic and both deserved us to spend more time there. The people are a lot warmer than in Chile and you will never be bored for even one day wherever you are.



Valparaíso



Baños Morales thermal baths



Saltos de Petrohué



Patagonia



Buenos Aires



Iguazu Waterfalls

Sustainability

The city's public transport is very good, there is an extensive bus network with very frequent buses. Also there is a huge underground system. Some of the lines are brand new and even better than the Stockholm's underground I would say.

Other recommendations and observations

Don't be afraid to come to Chile, it is very secure and well developed, sometimes it can feel like you are in Spain. I think it's a very soft way introduction to the Latin America Culture and you will feel part of the family in no time.

If you want to ask me something feel free to write me and email at diogosi@ug.kth.se or whatsapp me at +351914787325. I would be very happy to help you with anything you need!