

**Exchange university**

École Polytechnique Fédérale de Lausanne (EPFL)

Degree programme

Mathematics

Five intense months of mathematics and fun

Before departure

I decided to apply for exchange studies because in my first year of master's I had already done most relevant courses in my favourite topics, and so one of my professors recommended me to go somewhere else for more interesting courses. I chose EPFL in Lausanne, Switzerland, as its offer was very complete. It was quite straightforward to carry out the preparations, since I already spoke the local language (French) and Switzerland is well-integrated into the Schengen area in Europe, hence no need of visa, vaccinations, etc. I filled a study plan with the help of the exchange and master's coordinators and followed the steps indicated by EPFL.

Upon arrival

I came to Lausanne about 10 days before the semester started. This is because I enjoyed a few days travelling around Switzerland with my family, and a presentation event was scheduled 4 days ahead of the first day of class. The staff at EPFL helped a lot in the first days, and it was straightforward to get the student card and the necessary documents for registering at the town hall. EPFL has several student unions and clubs to make life easier in the first couple of weeks, such as ESN for exchange students, board games (that I usually joined), mountain, chess, dance, etc.

Financials

As I do not receive a Swedish scholarship at KTH, I received the SEMP scholarship from the Swiss government, amounting to 2200 CHF for the whole stay, i.e. around 440 CHF (or 470 €) per month. This is generally not enough to cover all the expenses in Lausanne, as accommodation itself is usually between 700-1000 CHF for a single room in a shared flat or dormitory. Counting trips around the country, which we did often, I spent around 1500 CHF per month on average. Although the daily expenses (supermarkets, transport) are not dramatically greater than in Sweden, some activities like eating out do cost much and I tried to avoid them.

Accommodation

Accommodation is arguably the toughest issue when moving to Lausanne. There is a foundation (FMEL) linked to the university providing places for students, but the number of places is very low compared to the amount of students in the city, so most people do not get a place there. Hence, I recommend searching a place in the private market very early. In my opinion, the best webpage is the portal UNIL-EPFL, whose accommodations are checked by the university and thus are less likely to be scams. I highlight this because I was myself scammed with an accommodation found in Facebook. In any case, double check every place and try to get a visit, either in person or call, to get more reliable information from the person renting. In the mentioned portal, the most successful way to be accepted by some owner

was to call them directly, preferably speaking French. In the end, I was lucky enough to find a room in a shared flat for 850 CHF, and relatively close to EPFL, especially by bike (10-15 min).

University and studies

The structure of universities in Lausanne is very similar to the one in Stockholm, with an engineering school, EPFL, and a more generic university, UNIL, in the roles of KTH and SU, respectively. The campuses are nearby and far from the city centre, offering a very pleasant area by the Lake Léman, but still well-connected to the city by bus and metro. Both universities have a lot of students, and a very wide study offer. Usually, bachelor's courses are taught in French and master's courses in English, although it is possible to find some bachelor's courses in English, especially those related to fields where English dominates globally, like informatics or quantum physics. Although I did not need any, I know there are a lot of language courses (mainly French) that take place during the semester and also intensive courses the month before starting.

Courses

As explained above, I chose the courses in order to deepen my formation in some of my favourite areas, namely geometry and topology, in order to be ready for my master's thesis. Unfortunately, shortly before the start of the semester (during the summer), I learned that two of the courses I planned to take would not be offered this semester, namely "Homotopy theory" and "Cohomology rings". I had done my study plan taking into account last year's courses, as no information was given on which courses would be offered. I think that normally around 25% of the courses in mathematics are not given, so that is something to consider. In the end I found a couple of replacements and ended up following 4 courses: "Mathematical modelling of behaviour" (MATH-463), "Quantum physics II" (PHYS-314), "Riemann surfaces" (MATH-410) and "Student seminar in pure mathematics" (MATH-563). I was lucky I was a 2nd year master's student, and hence all my courses left in Sweden were elective courses, so I did not need to look for a precise match for each course. But this might be a concern if you are a bachelor's student with mandatory courses left. Also, the math level at EPFL is higher than in Stockholm, so I would not aim for many credits in hard courses as the workload can become heavy.

City and country

The culture shock in Switzerland is not huge, and in any case easy to handle, apart from the high prices. The whole country has very good services and everyday life is easy from the first day. Most cities are safe and the central streets, normally pedestrian, are very pleasant to walk by. In particular, Lausanne has a very beautiful city centre dominated by its cathedral. In addition, most big cities lie by some lake, offering another nice experience especially in the summer months. In my opinion, though, Swiss people are not as welcoming as Swedish people, and they usually restrict themselves to doing the necessary for things to work. Despite that, I was very much at ease in the country.

Leisure and social activities

Social life was by far the best part of the exchange. Although EPFL demanded a lot, I joined the ESN activities from the beginning and got amazing friends very rapidly. Since that moment, we carried out diverse plans very often, either in the city or around the country. This included bars, Just Dance nights, board games, piano (EPFL has several, look for them!), hiking, every kind of sport and even crossing to France for sushi! Some recommendations for hiking are Mont Tendre, Rochers de Naye, Lac Lioson, Aletsch Gletscher, Zermatt or even Saxer Lücke in the other end of the country. There is a day pass for 80 CHF for 4 people under 25, ideal for these day trips.

Sustainability

EPFL has an own bike shop and sells second-hand bike for students at a very good price. They also rebuy it at the end of the semester for half the price. I got one when I arrived and used it for the whole semester, Lausanne being a bike friendly city. If there is some issue with it, they are happy to help you fix it. I advise to get there as soon as possible in order to select one of the best bikes they have. For the rest,

Switzerland is an environmentally friendly country, with frequent, reliable train connections to almost everywhere.

Other recommendations and observations

Switzerland is not part of the EU, and there are some small issues related to this fact. The main one to think about is data roaming, as this is not free as in other countries. Therefore, I recommend getting a SIM card from a Swiss company. I used Digital Republic, which offered good conditions for 10 CHF a month and delivered the card in a couple of days.