

**EXCHANGE REPORT****Name****Year and term for exchange**

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**Exchange university**

ETH Zurich

**Degree programme**

Biotechnology

## Ain't no mountain high enough

### Before departure

My application to ETH was rather spontaneous, I wasn't a skier or determined to go to one of the top-ranked universities. I simply wanted to gain new experiences and move further south. In fact, the main reason I chose ETH was because I could directly transfer the credits from courses I took there to my mandatory courses at KTH. However, I couldn't have imagined a better exchange year!

### Upon arrival

Two weeks before the semester started, I attended an intensive German course with many of the other exchange students. I arrived around two weeks before the start of the German course to have enough time to arrange all the paperwork with the authorities, ETH, bank office etc.

### Financials

Switzerland is a very expensive country and I spent on average around twice as much as I would do in Sweden. I found that the food was a lot more expensive and therefore always made sure I had lunch boxes and if having dinner with friends, we would always eat at someone's place. I received 2000 francs/semester from the Swiss-European Mobility Programme and an additional 3000 francs from a foundation called Heyning-Roelling. This helped me a lot, but I also had to dig deep into my savings. However, I wanted to experience as much as possible during my exchange year and travelled pretty much every weekend to the Alps for hiking/skiing and although this was expensive, it was always worth it! You can buy a Halbtax card which gives you half-fare on all travel tickets.

### Accommodation

I stayed in three different places during my year in Switzerland, because I hadn't planned to stay the whole year in the beginning. I organized all places myself via wgzimmer.ch, but ETH also distributes available rooms. Finding a place to stay was not difficult, I responded to maybe 10-15 adverts and had one Skype interview before arriving. If you haven't found a place before arriving, don't worry! There are plenty of room listings close to the semester start and many students arrive without having a set place. At first, I was living in a *Wohngemeinschaft* where we were 6 students sharing an apartment. This was really nice! The entire area where I stayed had similar living arrangements and it was truly like a small community of students. I recommend this very much! You immediately meet both Swiss and foreign students and make friends very easily. During the spring semester I rented a room from a Swiss girl in a "normal" apartment complex (not for students), which was calmer but if you want to meet new people I would recommend searching for a *Wohngemeinschaft*.

### University and studies

During my year at ETH, I had one semester of courses and one semester of writing my Master's thesis. This was an amazing opportunity to experience both the educational and research environment at ETH. Studying at ETH is quite different from studying at KTH. You have perhaps 6-10 courses in parallel, instead of two. In the beginning, this was rather difficult to manage, and it required some extra effort to keep track of all of them. Depending on your subject, you may have courses at two different campuses located at opposite sides of the city. The learning pace at ETH is *much higher* than at KTH and the students are expected to work hard and learn independently. I would recommend taking fewer courses with more credits rather than many small ones, since the workload is pretty much the same regardless of how many credits you get for the course.

I enjoyed writing the Master's thesis more than taking courses. Although the pace was still high, and my supervisor had high expectations on me, I preferred having one focus and not many different courses at once. This was a hard-working and motivated environment with a lot of possibilities for developing my scientific skills.

## Courses

I took the following courses:

- **529-0459-01L** Case studies in process design
- **529-0613-01L** Process Simulation and Flowsheeting
  - Case studies and process simulation were together supposed to be equivalent to Bioprocess design, the only mandatory course I had to consider. However, they were only computational and more directed to chemical engineers. I learnt a lot about chemical engineering and process design that I had not learnt previously at KTH.
- **535-0022-00L** Computer-assisted drug design
  - This was an overview course about machine learning in drug design. You get an insight in current strategies in drug development and how machine learning can be used for it. The lecturer Prof. Schneider is a fantastic teacher and I ended up doing my Master's thesis in his group during the spring semester. Highly recommended!
- **535-0030-00L** Therapeutic proteins
  - This course covered the basics of immunology with different strategies of drug development and some insights into the pharmaceutical industry. It was very interesting and both Prof. Halin and Prof. Neri are passionate teachers.
- **535-0310-00L** Glycobiology in drug development
- **551-0317-00L** Immunology I
- **636-0017-00L** Computational Biology
  - Computational Biology was by far my favourite course. The course was very well organized and the teachers were great and seemed deeply invested in the learning of the students. All lectures were recorded, which was great for studying for the exams. Every other week, we were given a programming task to solve, which encouraged me to learn not only the content of the course, but also to code in R. Challenging and technical, but extremely interesting course!
- **636-0105-00L** Introduction to Biological Computers
  - This course was held in Basel with video lectures to Zürich. It covered strategies and current research in synthetic biology and basically taught biology as a toolkit.

8 courses were a lot to keep track of, but the content was really interesting and I enjoyed having a wide selection of courses to choose from. The learning pace in all courses was high, which was both challenging and motivating. Having such spread courses also made studying lonelier, since I didn't really have a class. However, I'm happy I've had this experience because it challenged me to reach out to new people, some of which are my really good friends today.

### City and country

Zürich is a nice city with a lot of things going on. There's almost always some event by the Opera house, and during the Winter months, there is a very nice Christmas market there. During the summer months, one of my favourite activities was to float along the rivers that go through Zürich for hours. Zürich's own small mountain, Uetliberg, is also really nice to visit on a clear day.



Floating down the Limmat

However, the best thing about Zürich is, in my opinion, its location and accessibility. You can reach the Alps within 2-3 hours by train to hike or ski just for the day, which is great when you always have a lot of studying to do. We were a group of students who travelled to a new location every weekend. Switzerland is in general very accessible by train, so if you get the chance to study there, make sure you get to experience the amazing landscapes. It is really worth it!

Here are some pictures from our trips:



Jungfrauoch



Oeschinensee



Ortstock



Saas-Fee

### **Leisure and social activities**

I spent most of my weekends hiking or skiing, and during the week I usually visited the various (free!) sports centres offered by ETH. They offer *all* kinds of sports and activities, from dancing to football to volleyball. I even attended a six-week salsa course.