

**Exchange University**

Politecnico di Milano

**Degree programme**

MSc Applied and Computational Mathematics

## Exploring Milano During a Pandemic



### Before Departure

I applied for a semester at Politecnico di Milano without much hope of being allowed to go – it was a pleasant surprise that the exchange was not cancelled due to Covid. I think the combination of Italy with their culture, the location of Milano being close to skiing resorts and other potential weekend trips destinations as well as Politecnico commonly being viewed as the best engineering school in Italy appealed to me. My expectations were affected by the pandemic as I feared not being able to do many social activities, however I hoped to still go on weekend trips, and speaking some Italian. I also had in mind that Italy could enter a second lockdown due to Covid, which also turned out to be the case in November, causing me to return to Sweden and continue my studies remotely. Before that I managed to get to experience at least some of the Italian culture.

The main preparations were to 1) finding courses matching my program at KTH, and 2) finding somewhere to live. As an applied mathematics student, finding related courses was relatively problem-free. Concerning a place to live, Airbnb turned out to be a reasonable option since the prices were low (the pandemic was probably a factor here).

### Upon Arrival

I arrived at Milano eight days before the studies started, and hence a day before the ESN Welcome week. This introduction week organized by ESN Milano was well organized, however it was unfortunately affected by the pandemic during my stay since spots to the events were limited. Consequently, it was difficult to get a ticket to the different activities. I did however manage to go to a trip to lake Como, which was a highlight of my exchange. I would recommend attending as many of such events as possible, especially post-pandemic.

## **Financials**

As an Erasmus+ student I received a grant of about 4000 SEK per month, divided into two larger payments. Furthermore, I applied for additional loan because of exchange studies from CSN. This helped me live relatively pain free while in Milano. Compared to Stockholm, Milano is about as expensive when it comes to groceries, and slightly cheaper when it comes to restaurants and bars. The main part to consider when it comes to financials is the rent, which could be compared to the situation in Stockholm. During my stay, Milano entered the second lockdown in November, and consequently I returned to Sweden mid-November. Although extremely disappointing, this saved me some money on further accommodation.

## **Accommodation**

As already hinted, accommodation was probably the trickiest part of my exchange semester. The rent of apartments in Milano is comparable to that of Stockholm and finding a good place to live is a real challenge, as the university does not provide any accommodations. My strategy was to make a post on Facebook, specifically in the group "Svenskar i Milano", as well as to search on other websites such as Airbnb. On Facebook I received several tips and a few offers. One of these offers I accepted, and this is where I stayed during the first month. Even though the host was super friendly and helpful, I soon decided to change to another apartment, as the apartment had some flaws I did not foresee and was not ideally located in Milano. Instead, I switched to another apartment close to Milano Centrale, which I found through Airbnb. This was a nice, small apartment with a good location, but even though it was relatively cheap for being rented through Airbnb, it was still over my ideal budget, and the exchange became more expensive than I previously had in mind. In retrospect, I think I should have tried to find a shared apartment. A friend of mine stayed at a nice apartment with a friendly Italian woman, at Isola, a superb neighborhood, at a cost much less than mine. Hence, my recommendation would be to look up the areas where you want to live, and after try to find good hosts. An idea could be to get a temporary resident for a few weeks and looking for an accommodation while in Milano.

## **University and studies**

Politecnico di Milano is a large university with more than 40,000 students. It has seven campuses located in Milan and in other nearby cities: Cremona, Lecco, Mantova and Piacenza. Its focus is within engineering and design, and it is considered as one of the best architecture schools in the world. Its two main campuses are campus Bovisa and Leonardo, both situated in Milano. My courses were only at campus Leonardo. I found that the courses at Politecnico were similar to courses at KTH, with the same structure of lectures and exercises, and with similar workload. Keep in mind however that a 5 credits course could very well be similar in terms of workload to a 10 credits course when choosing subjects. Regarding language there was a possibility to attend language classes during the semester. A main difference is that there are only two main exam periods per year. This is common for European schools, however not something I was used to. I think that last minute exam studies are much more manageable when you have two periods per semester instead of just one, so do not make the same mistake as I did and start studying in time! Another difference is that Politecnico has four re-exam opportunities per course instead of just one. For the fall semester, this means that the main exam period is in January, and then there are re-exam periods in February, June, August and finally September, which means that you have many tries. A tip if the workload is heavy would be to spread out your exams during the winter session, e.g. take some exams in January and some in February.

## **Courses**

I attended four courses in total at Politecnico: Algorithms & Parallel Computing at 10 credits, Data Driven Control System Design at 5 credits, Stochastic Differential Equations at 8 credits and Artificial Neural Networks and Deep Learning at 5 credits. The first three of these courses I had limited prior knowledge about, which made my studies quite challenging. Algorithms and Parallel Computing I thought were mainly a course about programming in C++, a language I had not used before, and this was the most demanding course. Similarly, the course on Control System Design required more

knowledge about automation and systems than I had, and finally stochastic differential equations required prior knowledge about probability theory, a course I had not yet taken. I can still remember the surprise when the teacher said she was going to quickly repeat basic principles about probability in the first lecture, and I expected the concepts of mean and variance. Instead, she started talking about sigma-algebras and Borel spaces, and I was lost from day one. In retrospect, in spite of being challenging, I am quite happy about my courses, as I think it accelerated my knowledge in many areas.

### **City and country**

I think Italy in general and Milano in particular has a unique culture which I appreciate. I am especially a fan of the aperitivo – after any school day, at around 18, you order a spritz and some chips and sit outside with your friends. I would dearly recommend Brera or the Navigli area for this. Compared to Swedes, I would say the Italians are more open. This became obvious when doing a small group assignment with three Italian students – everyone of them got in touch with me afterwards, and one even invited me to a basketball game. I am not sure Swedes would do the same to an exchange student. Also, you will notice that Italians will not hesitate to express when they like something - bellissima, che bella, ciao bello are expressions you hear all the time. Contrary to Scandinavians, Italians are not afraid of conflicts, as friends argue with each other all the time. This also becomes evident in the traffic. Lastly, you will notice that time moves a bit slower in Italy, as the Italians always prioritize long coffee breaks, long lunch breaks, aperitivo in the afternoon and late dinners.

### **Leisure and social activities**

As mentioned, a lot of my time was spent on aperitivo after school. Me and some friends explored a lot of different bars and areas for this around Milano - the supply for places to eat and drink is endless. Also, I would recommend attending the social activities organized by ESN as it is a superb way of meeting other exchange students from all over the world. I found it surprising how diverse the students studying at Politecnico were, as there were far from only European exchange students there. Furthermore, concerning sports, I joined a gym located at the center of Milano at a reasonable price. Me and my friends also went bouldering at a center called Manga climbing, located a bit outside the city center but well worth visiting. Not surprisingly, one could also go for an aperitivo at this center, which suits perfectly after a tough climbing session.

### **Sustainability**

In Milano, all households have different trashcans for different waste, one for food, one for plastic, one for metal and one for other waste, and not sorting properly could lead to fines. Hence, I noticed that the milanesi takes the sorting of waste seriously. Living close to the university gives the opportunity to go by bike to school, which is something I did, and it is indeed possible to travel by bike around in Milano, although it might be tough when visiting areas further from school such as Navigli.

### **Other recommendations and observations**

Politecnico di Milano seems like a less popular destination for KTH exchange students and I have not understood why. Milano is an amazing city and Politecnico is a great university, and I definitely recommend spending a semester or two here. To summarize my recommendations: spend time and effort to get a good accommodation, do not start studying too late, and plan many weekend-trips to all the wonderful places around northern Italy.