

Experience Report Czech Republic

Civil Engineering Internship in Brno, July to September 2023
Stefanie Almada, Aviation, ZHAW

Experience abroad

The most impressive experience abroad to me was how quickly one can get used to a new, different life. Although time seemed to pass by slowly in the very beginning of my stay, being at work during the week and meeting my coworkers as well as seeing other interns in the free time and travelling with them on the weekends made the weeks go by quicker and quicker.

Additionally, it was interesting to experience how “homely” a place far away from my actual home can feel, especially after returning from beautiful but exhausting weekend-trips to the neighbouring countries or other places within the Czech Republic.

Work experience

I was working at the Institute of Road Structures, which is part of the Faculty of Civil Engineering at the University of Technology in Brno. Although my primary field of study in Switzerland is Aviation, my fascination with materials science got me very interested in this quite distinct area of research.



Bitumen softening during a Ring and Ball Test.

What surprised me the most at my work were the variety of tasks I was given. The main objective was to study the material properties of Polymer modified Bitumen (PmB), which is primarily used to bind the different aggregates in asphalt. To do so, I carried out various "Ring and Ball" tests to determine the softening points of the different samples. In addition, I examined the same samples with a Dynamic Shear Rheometer (DSR) and compared the two methods. Lastly, towards the end of my internship, I was introduced to the dispersion stability of bitumen and its estimation, which was done by analysing the asphaltene contents using precipitation titration. Towards the end of my internship, I also got the opportunity to visit a mixing plant, which I found very insightful as I got to see the different steps to produce asphalt. All in all, I appreciate that I had the opportunity to learn many things, to get familiar with a (for me) new field of research and to get acquainted with laboratory work.



Visit to an asphalt mixing plant.

As for the laboratory team, my coworkers were all very friendly and welcoming. I appreciated the conversations we often had during the breaks that included the city of Brno, places to visit, cultural differences, and so on.

Cultural differences

During my stay in Brno, the second largest city of the Czech Republic, I fell in love with the welcoming atmosphere, the beautiful buildings and castle, clean streets, and the unique humour of the city. In addition, even though Brno is, in my opinion, a large city, beautiful parks to go hiking are not far away.



Short hike in Mariánské Údolí.

I felt very much at home in Brno and will miss the beautiful planet festivals, the never-empty streets, the “Big Black Clock” that nobody calls like that or knows how to read and, of course, the legendary dragon of Brno that actually looks like, and possibly was, a crocodile.



Planet festival after sunset.



Brno dragon with wings.

IAESTE

I am very glad having done my internship with IAESTE. They have lots of experience in dealing with interns and they know both the local culture and language. IAESTE had organised my accommodation and gave me lots of information regarding the travel documents required, the payment, etc., and were eager to help me whenever I needed help. Like that one time when I had trouble opening a bank account to get my payment, because the first bank me and an IAESTE member went to surprisingly did not accept the student confirmation I had received from the university. Luckily, though, that had been the only instance and I managed to open an account at another bank.

Lastly, IAESTE often organised events on the weekends or sometimes joined us interns when we had made some plans. All in all, I think that having done an internship with an organisation has made it a lot easier to meet new people, get to know the city and culture and therefore get the most out of the internship.



International cooking with Czech, Polish, Norwegian, Swiss & Tunesian dishes.