

ERFAHRUNGSBERICHT ÜBER STUDIENERFAHRUNGEN IN BAYERN [Report on study experiences in Bavaria]

Herkunftsland [county of origin]: Slovakia
Studium in Bayern [program in Bavaria]: von [from] Oktober 2017 bis [until] April 2020
Hochschule in Bayern [university in Bavaria]: TU München
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Abschluss [degree]: Master

I am currently finishing my master studies in the program Mathematics at The Technical University of Munich. I come from Bratislava, Slovakia where I also conducted my bachelor studies at The Comenius University in Bratislava.

On the next pages I would like to summarize my enjoyable stay at TUM and share some tips and views about the preparation process, the studies itself, how I see living in Germany and more specifically in Munich, as well as, what I gained from this experience and what are my future plans.

I. Practical experiences and tips

Preparation of the stay and administrative procedures

When I had decided I want to study in Germany for my graduate studies I did a comprehensive research about the offered masters and universities in Bavaria. My top choice was TUM, since it is a very well ranked university, with many international students and teaching staff and also the master program Mathematics offers a very wide choice of subjects and gives quite a big freedom to students, that can choose what they want to focus on and build the curriculum tailored to them.

The application process to TUM requires a big number of documents and thus is very time consuming and should not be left for the last minute. However, the description on the TUM internet page is very detailed and TUM has also an intuitive web application system and helpful application department, so overall experience was very good.

It took them several months to assess all the applications. I found out that I am accepted in the beginning of July and immediately started to arrange the necessities. After you are accepted you have to submit few more documents, such as e.g. healthcare insurance certificate, diploma. You also have to pay the fee for the next semester. However, all can be done quickly and easily through the application portal.

Accommodation

Finding the accommodation is one of the first big struggles that awaits every new student in Munich. The demand for the rooms is big. For each offered room there is a vast number of applicants and it usually takes several weeks to find something suitable. Additionally, one must be careful and not send any money before

the contract is signed (or ideally before you see the room) because there are many frauds out there, feeding on the desperation of people that look for a place to stay.

There are numerous ways how to find a suitable accommodation. Apart from looking for the rooms from a private sector, where one can expect prices ranging from 400-600 euros per room depending on the location, there are also other options.

In Munich there is a student organization Studentenwerk that offers dormitory rooms for low prices (usually app. 300 euros per month). However, the demand is very big and therefore the waiting times are usually around 2-4 semesters. Small tip: you can sign in for the waiting list for the dormitories sooner than you get officially accepted by the uni. For the newcomers there is also a possibility of joining a raffle and win a room in the dorm, however the chances are very low.

Another option is to apply for the private dorms, run by various charity organizations that offer places to stay for similar prices as Studentenwerk (some of them are listed on their webpage). Warning: the deadlines for the applications are quite soon.

In my case I lived for 1,5 year in a private dorm Unity Beta (not run by any charity organization) and then was assigned a dorm room from Studentenwerk. There are quite a few private dorms in Munich, usually very nice and new, but the prices are not as favorable as for the other "social" dorms (I paid 520 euros/month).

Language

There is a chance to take a language course before the semester starts and already refresh your German before you begin your studies. The demand for the courses is big and therefore one must be careful and pay attention when the application opens, to be able to quickly sign for one. Additionally, TUM offers many language courses also during the semester which I also took use of.

Travelling

From Bratislava there are 3 ways how to get to Munich, my favorite one is by train, since it is the most ecological and the most pleasant way. If one buys the ticket soon enough, the prices can be as low as 30 euros for a one way (but they can rise to 100 euros). Tickets can be bought through Deutsche Bahn or Austrian OEBB or personally in the station in Bratislava. The prices always differ, so it is useful to check all of the three options. Additionally, there are numerous discount Bahncard versions that one can order and then have cheaper tickets.

Another option is to travel by bus, which is the cheapest option, but it takes longer than the train and is also less comfortable and less ecological.

I have never used plane, and neither I am planning to, since the prices are usually high and also with all the hassle at the airport, it is not much faster than the train, not mentioning the bad ecological footprint you leave behind you.

Transporting in Munich

Depending on what you study, you can either be in the city center (some faculties of TUM and LMU) or in Garching TUM Campus that is in a town outside of Munich. Good news is that there is an U-Bahn that goes there. In the semester fee, there is some limited U-Bahn ticket already accounted in it (you can use it on the weekends and during off-peak hours) but it is usually reasonable to buy also a proper public transport semester ticket for students, that costs under 200 euros per semester and you can use all the measures of public transport (buses, trams, U-Bahn, S-Bahn) freely.

Another very common way how to move around Munich (and my favorite one) is by bike. Munich is a truly biking city, with dense net of biking routes that are safe and very often segregated from car roads and it is a nice way how to include some sport into your daily routine. Second-hand bikes can be bought for low prices already starting at 30-50 euros.

Sport and free time

If you are a sporty person, you will enjoy Munich very much. Big English Gardens that go from the center to the north of Munich offer many possibilities, to go for a running, biking, or just simple walking in the nature. You will find people that practice yoga, slackline, play football or beach volleyball, or even surf on the wave that is in the south of the English Gardens. Additionally, in the summer, you can swim in the river that goes through the gardens.

Universities in Munich are all united under the organization called ZHS that offers a vast amount of sport courses (almost any sport you can think of) and activities for students, for a very little money per semester. You can enroll for them easily, one just needs to check out their webpage and be ready to sign in, when the application opens, since again, the demand for some of them is rather big. Additionally to this, in Munich, as in every big city, you can find many courses and gyms run by private organizations.

Munich is a truly remarkable city, offering many ways how to spend your free time, I am a huge fan of galleries and art and there are many options what one can visit. Small tip: on Sunday many galleries have a discounted entry fee, when you can pay as little as 1 euro to visit exhibitions. For those in love with music, there are many bands coming to Munich every month, and also the clubbing scene is very colorful. For those that are fond of classical music, theater or ballet, the offer in Staatsoper could be a very interesting option.

Social life

Everyone is worried when coming to the new university about their future social life. For me personally, this was not a problem at all. I met many people at the German course, first week in Munich, and I became very good friends with some of them, which lasted during the whole studies.

Secondly, Faculty of Mathematics also organized information meetings for international students that offered another chance to meet new people. If still in the demand of options how to meet new people, there are many activities organized by university organizations such as TUMI or ESN that plan events for Erasmus and international students, such as parties and trips all around Bavaria and Germany. People are in general very friendly and helpful, so also during classes, if you want to make friends, you should have no problem.

Cost of living

Costs of living are around 800-1000 euros if one pays 500 euros for an accommodation.

II. Academic experiences and further qualifications

Courses

My studies at TUM were quite different from my bachelor university. First, but that is specific for my program, is the very broad choice of subjects where one has only few limitations that guide his/her choices. That is really great, since you can focus on the things that are really important for your future specialization and are interesting for you. You can even choose courses from other disciplines such as Chemistry, Physics, Biology or Informatics and they will (up to some limit) be accounted in your master credits. Additionally, one can also choose subjects from different universities.

Whereas at my bachelor, you must choose the subjects in the beginning of the semester and then you are obliged to take the exam, system at TUM is different. Here you enroll for subjects in order to receive

information and exercise sheets and other study materials, but the final decision - if you want to take the exam and earn credits from this particular subject - is totally up to you and you decide in the end of semester. You can also just enroll for exam and no one will ask you if you visited the lectures or not.

Some of the lectures are recorded, which can be very useful. One of the disadvantages of TUM is that it has big amounts of students, so it happens rather rarely that there would be classes where there is a real personal connection with the professor. On the other hand, the exercise classes are usually in the smaller groups and there the approach is more personal.

Another concept of a course is a so-called Seminar, where students meet in smaller groups (around 10-15 students) and present to each other lectures about a given topic. This is very interesting and helpful for practicing your literature review and presentation skills. Also, after conducting the seminar one can get a topic for the thesis from the supervising professor (as was also the case for me).

Libraries

Students in Munich usually do not study at home, but visit libraries (e.g. Stadt Bibliothek, or library at the Main TUM campus...) or study at the university, in rooms specialized for that. For students in Garching there are both libraries and rooms with quite powerful computers that everyone with a university login can use.

Internship and work

TUM supports activities that help students to learn something more applied and prepare themselves for the private sector after they finish their studies or just try how it is to work in the teams or conduct a research. That is why there is an obligation to take part in an internship at some company, research center or university, during the master studies.

It is also not uncommon for the students to work alongside their studies, either as HIWIs which are small contracts for just a few hours per week, or for up to 20 hours per week in the companies. Very often there are open tutor positions at the chairs of the faculty or positions for students that are designed to help professors with some simpler research tasks at the university. In my 5th semester I am also helping out as a tutor of a course Machine Learning where my task is to correct homework of the students and exams.

Additionally, TUM offers many courses that are project-oriented, where you work with your fellow students under supervision of your professor or some company employee that has an agreement with the university. I took part in the course Case Studies where in a team of 4 we tried to answer a question how to estimate a disease burden and how to assign resources to combat the diseases in the population.

Erasmus and international stays

TUM has a broad net of connections around the world and offers a wide choice of seminars, study or research stays. For example, Erasmus stay, international exchange or Athens program to name a few.

My studies

I am interested in the two main areas. Mathematical Analysis: Dynamical systems and Nonlinear Dynamics- in this field I am also working on my thesis. My topic is Global stability concepts of Dynamical Systems and another focus of my studies is on Data Science and Machine Learning.

During my studies I had a big choice of subjects in both areas and gained a high-quality education that I hoped for when I came to Munich. The lecturers were very professional and devoted, and the overall quality of the content and material was very high and interesting. TUM enriched me in many ways. It gave me high quality education and a possibility to be part of a very well-functioning university environment, my fellow students inspired me to work hard and to try to be better, I met many interesting people from the cultures from all

around the world. It shaped me professionally as well as personally and I will try to make as much use of it as possible- bringing my newly acquired experience to Slovakia.

III. Future plans

After finishing my studies, I am planning to apply for the PhD positions, most probably in Slovakia and continue pursuing my research interests in the field of Dynamical Systems and Nonlinear Dynamics as well as teach at the university.

I am very grateful for the opportunity to study at TUM and in Germany. This experience was one of the most important and extraordinary experiences in my life yet and without the financial support of BAYHOST it would not be realizable. I would like to thank you from my whole heart for making this possible to happen! :)