

**Exchange university**

Shanghai Jiaotong University

Degree programme

Dual Degree Master Medical Engineering

Exchange to Shanghai

Before departure

As an international student from the Netherlands, I knew how fun it was to go to a new country and to make new friends. Having been abroad within Europe, I wanted to challenge myself and live for a longer time in China to learn from their different culture and language. The Dual Program between KTH and SJTU was an opportunity for me to visit China and explore this country that has always fascinated me. Even though I expected it to be tough, in terms of administration and language, I wasn't prepared for the numerous challenges I faced. In the semester before coming to Shanghai, I followed the basic Chinese course, but as it was in Swedish, it was quite difficult for me. Besides, the vaccinations and visa applications were quite straightforward, the invitation letter from SJTU was enough to get the visa.

Upon arrival

I arrived a few days before the start of the semester. At that point, we hadn't received any information on the courses, schedule or registration procedure. There was no social introduction, nor were there any introduction courses. A few days after the start of the semester, the Biomedical Engineering department organized an information day for international students, where we got a tour to most of the research groups within the department, so that we could choose our supervisor. By that time, it was too late to register for some courses, as the spots were filled up already. The university arranged a day for the medical check, which is mandatory for students to change their visa into a residence permit.

Financials

I received the travel grant from KTH for the studies. Dual degree students were not eligible for a scholarship from SJTU or from the Chinese government. Even though I had the KTH insurance, I still had to pay for the insurance from SJTU. The university helped with setting up a bank account at Bank of China, but activating it was difficult as the employers didn't really speak English. You need the bank account to set up convenient apps like Alipay and WeChat, which are used very frequently to pay, some smaller places don't accept cash or card.

The food in the canteens was good and much cheaper than in Sweden, a full meal costed around 14 SEK. Even though there is no special discount for students for the public transportation, it is also very cheap. Since Shanghai is such a big city, you can find restaurants, night life and entertainment in every price range. At the countless markets and street shops, bargaining is an art and your skills in it will determine how cheap Shanghai is. Accommodation on campus is very affordable (around 2500 SEK/month), but out of campus it can be more expensive, especially when you don't speak Chinese.

Accommodation

As Dual Degree students, we were not allowed to apply for housing at the campus during the first application round. However, in the second round, there were around 10 places left and I was lucky to get one of these places. I shared a small room in the international dorm of Xuhui campus with a Belarusian girl during the first semester, and a Japanese girl during the second semester. The room was small and didn't have a kitchen, but the location was perfect, and it was the most luxury building of the campus. Most apartments in Shanghai don't have central heating, instead they use AC to heat the rooms, so it can be quite cold in winter.

University and studies

Biomedical engineering at SJTU is divided between two campuses. The campus in Xuhui is quite small and older than the campus in Minhang. SJTU has around 40.000 students in total, and even though the number of internationals is growing fast, within Biomedical Engineering there are only around 20 (of which 6 were from KTH). The university offers a wide range of programs, with most of the courses taught in Chinese. I could only choose the small selection of courses in English.

The introductory courses in Chinese culture and Chinese language were mandatory. Most of the courses consisted of mandatory lectures, writing an assignment and presenting a discussion of a paper. There were only a few exams, and in my opinion these exams were easier than at KTH. Teachers were usually happy to help, but their English proficiency varied.

Courses

As mentioned before, there were only a few courses that were taught in English. After arriving, I found out I had to take courses worth 28 SJTU credits, which corresponds to around 56 KTH credits. On top of that, the thesis was expected to last 3 semesters, or 1,5 year. Most of these courses were fixed and mandatory; the few remaining electives were hard to fill as there were just not enough English courses to complete the curriculum. It happened several times that we entered a class which was supposed to be taught in English with a few international students, but we got sent away because they changed the course back to Chinese. In some cases, the teacher would speak in Chinese and summarize in English. In other cases, we didn't have to attend the lectures and had to make a presentation instead.

Transferring the courses from KTH to SJTU was very difficult and took very long.

For the Chinese graduate students, the focus is on the research work in the group of their supervisor. I regularly had lab meetings, in which we discussed papers and received work to do for the research. In order to graduate, you also need to publish a (conference) paper.

Finally, my course plan was as follows:

Course name	Transferred from KTH	Followed at SJTU	SJTU credits	Comments
Laser Medicine		X	2	Chinese course, but I did a presentation instead of following the lectures
Recent Advance in Cancer development, Diagnosis and Therapy		X	2	Partly in Chinese
English for Academic Purposes		X	2	I had an exemption for the lectures, so only had to attend the exams and presentations
Academic Reports		X	2	Partly in Chinese
Neural Control of Movements		X	2	
Design and standardization of Medical Devices	HN2013/ HI2010		2	
Neurobiology	DD2401		2	
Chinese Language		X	2	
Introduction to Chinese Culture		X	2	
Basic Mathematical Statistics		X	3	
Multidimensional medical image processing and visualization	HL2027/ DD2423		2	
Biomedical Signal Processing		X	3	Partly in Chinese
Advanced Biomedical Image Processing	HL2027		3	
Advances in Medical Imaging and Image Analysis	HL2027/ DD2423		1	
MRI: Technology and Applications	HL2011		2	

City and country

The first weeks in Shanghai, I suffered from culture shock. I arrived in a humid, warm Shanghai full of sounds, smells and traffic. It was exciting and tiring at the same time. Later, I started to appreciate the delicious food, the interesting people and their habits. I enjoyed learning to write Chinese characters and exploring the city bit by bit. In my experience, Chinese people are very willing to help you, and even if you don't speak their language, they will try to talk to you. However, as foreigners are still quite rare in some of the suburbs of Shanghai, people might look at you and take pictures with you.

Leisure and social activities

Even though I tried hard to study Chinese, the language barrier remained a problem for me. It was hard to get into contact with students, because we couldn't understand each other. The university has a lot of associations, like music, sports, and Chinese arts. Most of these are not very international-friendly, but there is a buddy program which connects you to a Chinese student. During the Dragon Boat Festival, I participated with the international team in the Dragon boat races, which I enjoyed a lot. In Minhang campus, there are also swimming pools, sports fields, and even a bowling lane.

The workload was very high, so I didn't have a lot of spare time. Sometimes, Saturdays and Sundays were considered workdays, to make up for national holidays in the week before.

However, I did go on some trips. I visited Beijing, Hangzhou, and Suzhou. I also went hiking in Zhejiang province and in Huangshan. Going to these places is very easy and fun, there are a lot of organizations in Shanghai that can help you with this. Also, within Shanghai there is a lot to do. During my time in Shanghai, I have been to a lot of museums, old towns, temples, parks, clubs, KTV's and concerts.

Other recommendations and observations

I would advise to get a VPN, as Google, Facebook and a lot of other websites are blocked. WeChat is used to communicate, for events, but also by teachers and staff at SJTU for 'official' announcements.

After I finished my studies, I travelled alone from Shanghai to the west of China by train for two weeks. I can highly recommend this, as it was such a nice experience and I saw a lot of China in this way. I felt very safe travelling and I am grateful for the wonderful time that I had.

All in all, my experience in Shanghai has been tremendously challenging, but even though it was difficult, I have never felt so alive before.