

SEP Report

1. Student Information

Faculty/Major	FoS/Physics
Host University	Ludwig Maximillians University, Munich (LMU)
NUS Semester and Year of Exchange (eg. AY14/15 Semester 1)	AY15/16 Semester 2

2. Study at Host University

Please provide information on the academics at your host university:

- **Studying or learning culture at your host university. How were classes conducted?**
- **What did you like most or dislike most about the academics at your host University?**
- **Advice on module registration and module mapping**

There is much academic freedom at my host university. The physics students only need to take physics-related courses, on average 3 per semester. There are only a few essential modules and the rest are electives. On this matter, it is similar to the NUS structure. In physics lectures, the professors would just use chalks to write down everything on the blackboard. However, not all the notes would be uploaded, the students are expected to read textbooks, sometimes several at the same time, on their own.

One thing I particularly like about the academics at LMU is the flexible course system. At the start of the semester, there is no official registration for any course. One can go for whatever courses one wishes, be it at the bachelor level or the master level. Then, during the lecture, one needs to register for tutorials, but there is no restrictions on who could take them. Simply put, one can take any course. Moreover, because there is no official registration for courses, there is no penalty for dropping the course at any time during the semester. In the end, if one wish to get a grade for the course, one only needs to take the final exam. Then one would receive a "Schein" (which records the student particulars and the grade). Even then it is still not final, one could still choose not to hand in the "Schein" and it would not be recorded in the record of the student. Therefore, the freedom in taking courses is greatly appreciated.

Perhaps as a price for this freedom, the administrative process is almost entirely manual and cumbersome. One has to fill in the "Schein", get it signed by the secretary of the professor and then submit it to the international office to initiate the transcript.

It is possible to map Fortgeschrittenen Pratikum for EP2. However, it is groupwork and the report might have to be written in German if your groupmates are not very good in English. A senior had told me that there was another lab module that could be mapped for EP2, but I am not sure which.

In general, it is very easy for physics student to map modules, but one has to beware either that the bachelor modules (for our level3000 modules) may be easier but are conducted in German or that the master modules (for some of our level4/5000 modules) are conducted in English but kind of difficult. Statistical mechanics was very difficult for me, partly because I was taking another two master physics courses and one bachelor programming course, so I stopped going for the lectures in the middle of the semester and focused on the other modules.

SEP Report

Please list the courses that you took during SEP. (Please take note that the list of modules available to exchange students at the host university are subject to change. This table merely serves as reference.)

Host University			NUS Equivalent		
Module code	Course title	ECTS Credit	Module code	Course title	Modular credit
17146	TMP-TC2: QFT in Curved Space		PC5206	Selected Topics in Quantum Field Theory	4
	Introduction to QFT		Same	same	4
	Programmiertechniken		CS1010S	Programming Methodology	4
	Fortgeschrittenen Pratikum		PC3119	Experimental Physics II	4
	Language Preparation Course		LAG4000	Language Dummy Course	3

2. Accommodation

What kind of accommodation did you stay in during your exchange (eg. on campus / off campus)?

Would you recommend this accommodation to future outgoing students?

Do you have any other suggestions?

It is indicated in the application to the host university, so you just have to check the box in the application form. All the accommodation is allocated through the Studentenwerk (student union) based on the university and courses you take. I was allocated to Olydorf, so if you are a physicist, mathematician, or art students going to LMU, you would probably get Olydorf as well.

It is awesome.

Unfortunately, I am not able to provide any tips for private rental.

3. Activities during SEP

Were there any activities organized by school/student group/external organizations at your host university which you would like to recommend to other students?

The language preparation programme is highly recommended. It improved my spoken German a lot, and it is also a great chance to know other exchange students from all over the world. Also, the programme includes several excursions to nearby places of interest, like the Schloss Neuschwanstein (New Swan Castle).

There were not many school organized activities per se, but there were a lot of parties, the ones with loud music and intimate "dancing". I did not like them, but it is entirely a matter of personal preference.

SEP Report

Due to the gap in knowledge between what I have learned and what the master classes required, I had to read more to catch up and thus did not skip many lessons to go on trips. In fact, I struggled hard to keep up and feared actual failing courses. In the last one and a half months, I was in school almost everyday, studying with physicist friends. It was tough but very fun. Nonetheless, I was there one month earlier for a language preparation program. I took all the spare time I have to travel before the semester started. I have trekked on the snow mountains and ventured into glowing ice caves on Iceland. I have sat by the Donau and listened to street musicians while savouring a cup of coffee. I have been awed by the towering Gothic church, St. Vitus Cathedral, and the magical sunrise on Charles' Bridge in Prague. I have ridden the train along the beautiful coast of Sicily. I have seen the northern light. I have tasted Gelato. I have had probably more Italian food than German food in Munich. I have taken a 14-hour-long bus ride. I have been on a cab, which raced through Poland at 140km/h, to catch the plane. I have also missed that plane and took three others to get to Iceland. There were more, and things just happened. Both tears of joy and tears of sadness are part of the experience. Good or bad, they make me a better person, who could now face the turmoil in life with a little bit more calmness.

7. Suggestions for future outgoing students

Please share any other suggestions for future outgoing students.

In general, you are recommended to research on the public holidays in Munich, as there is no recess week in the middle of the semester for you to travel, so you have to be resourceful.

For physics students, Prof Mukhanov is a very interesting professor. I highly recommend to attend his lectures, probably on general relativity or quantum field theory in curved space.