

達姆施塔特工業大學創辦於 1877 年，是德國境內著名的理工大學。大學位於達姆施塔特，一個在法蘭克福正南方的小城市。該大學的特色之一是創辦了全世界第一個電氣工程系，培育在當時急需的人才。

我在這間大學選修的課程總共有四門，最後決定參加考試的有三門。第一門是開學前一個月參與的德文衝刺班。另外三門分別是德文 A2、進階量子物理，以及核子天文物理。其中我覺得學到最多，且最喜歡的課程是量子物理。由於物理學系提供給學士班的課程都是德文授課，我選擇了難度高出許多的碩士班課程。雖然課程內容具有挑戰性，但是我很喜歡這個領域。上課的內容有很多部分是基礎知識的延伸，考驗之前的學習成效。德文課學到的知識也不少，不過我認為在日常生活中的應用以及參加語言交換的活動，更能幫助熟悉德文。而我唯一沒有參加考試的是核子天文物理。我上了前面幾堂課，發現課程內容不太符合我的興趣，加上難度過高與評量方式困難，因此我決定將學習重心放在其他課程。雖然最後期末考我並沒有通過量子物理，但是我在這次的考試中了解自己在哪方面的知識需要加強，也了解德國考試的方向與方式。

在這學期的交換我也參加了許多課外活動。交換校提供了非常多種的運動選擇，我分別參加了獨輪車以及柔術。兩項運動都是以前在台灣從未嘗試過的，很開心有這個機會學習。此外交換生組織 ESN 在每星期舉辦需多不同的活動，如品嚐德國各地的啤酒，或是到達姆施塔特附近一日遊，讓交換生能互相交流，也讓我們能更了解德國的文化與風景。我在入學前也申請了學伴計畫，幫助我在德國的生活更順利。我認為比較可惜的地方是學校並沒有太注重學伴計畫，且學伴計畫也是由一個全歐洲的組織統合，非各學校自行辦理。此外大多數參與學伴計畫的當地學生都是在該校讀書一到兩年的外籍生，雖然他們能很清楚的提供我們交換相關的資訊，但是我還是希望這可以是一個能認識當地學生的機會。

這次交換的具體效益，我覺得可以分成下面幾點：

1. 學習新知識

我在來德國交換時查詢了他們的課程項目，避開之前就學習過的內容，期望能將交換學習的效益放到最大。

2. 了解德國 (包含學業風格、生活等)

在交換時我喜歡觀察這裡的事物與台灣不同的地方。以學習方面來說，德國學校參與課堂與否非常自由，有些人每堂課都會出席，有些人只會在第一堂課出現，之後選擇自己讀上課內容。我很喜歡這樣的彈性，因為每個學生都能安排自己的時間，也為自己的選擇負責。在生活上也有很多有趣的地方，像是他們星期日幾乎所有商店都不開門，且街道上很少人，又或是遇到他們舉世聞名的火車延誤。

3. 了解各國文化

除了德國文化，參與交換生的活動也讓我認識不同國家的文化，以及他們對台灣或是亞洲的想法。像是西班牙人普遍的午餐及晚餐時間都比台灣人晚很多。或是有些人認為亞洲人都是坐在地上吃飯。

4. 理解不同的觀點

在與不同交換生交流的過程中，可以發現因為擁有不同的歷史背景與文化，在討論一件事情時可以聽見很多不一樣的聲音。我覺得在討論政治議題的時候更能看出這一點。

我在交換時面對最大的困境就是生病。在這裡的診所預約都要等好幾天，看診完也不會開藥(但是有藥單)，必須自己去藥局買價格不便宜的藥(不包含在健保裡)，因此在這裡會變成預防勝於治療，儘量讓自己保持健康。有一次因為牙齒非常痛，疼痛感讓我晚上睡不著，所以隔天在牙醫診所一開門時就去預約門診。很幸運因為當天牙醫剛好有空缺，且牙痛屬於緊急狀況，當天晚上就可以會診解決問題。

海外生活沒有遇到什麼文化衝擊，不過飲食習慣上的不同非常有趣。歐洲的食物我都很喜歡，不過他們幾乎都吃生菜，而我個人比較偏好烹飪過的蔬菜。其實可以理解為什麼很少有像台灣那樣的蔬菜選擇，因為這裡氣候的關係，無法種植出多樣化的蔬菜。這是我唯一還需要習慣的地方，不過或許有更好的方法可以找到自己喜歡又能有均衡營養的方式。

這次的交換也帶給我很多的省思。我學會如何更主動的去社交以及在課堂上互動。在台灣時，雖然各類的活動也是需要自己找尋，但是多少會有一些資訊可以當作線索。在德國，幾乎所有活動都不會有宣傳，也不一定會有人跟你說。這讓我更能積極地尋找資源，在往後的生涯中也可以運用這次的經驗給自己更多的機會。另一方面，平日上課時，同學們遇到問題都會直接在課堂上發問，我認為這是一個很好的習慣，因為或許別人也會有與自己一樣的問題。直接提問可以省去下課找教授的時間，也可以讓教授不用重複回答相同的問題。

另一件我學到的是生活與學習的平衡。身為交換生，選課的自由度非常高，課業多寡也可以自己決定。什麼事情都可以自己決定時，就很考驗自身的自律。我花了一些時間才抓到課內與課外的平衡，讓自己能在享受海外生活時，也能同時認真學習。

最後一項我認為帶給我最大改變的是學會單獨一個人。我很喜歡和其他人一起做事，在台灣總是有人可以一起吃飯。但是到了德國，在課堂中很難與同學交流，雖然參加許多社交活動認識很多新朋友，但每個人的課表行程都很不一樣，這讓我在大部分的時間都是一個人。剛開始難免會感到寂寞，但我慢慢地發現有時一個人也不錯，獨自一人不一定會感到寂寞，它是一個能與自己對話，好好思考的時間。有時候也可以去一個說走就走的旅行。

我認為出國交換是我在大學做過最好的決定之一。它不只是換一個地方學習或是給自己的充電時間，它也是一個能自我成長，找到人生方向的過程。

Technische Universität Darmstadt (TU Darmstadt) was established in 1877. It is one of the well-known polytechnic universities in Germany. The university is located in Darmstadt, a city right below Frankfurt. The very first department of electrical engineering was founded here.

During my exchange in TU Darmstadt, I selected four courses, which are German intensive course, German A2, advanced quantum mechanics, and nuclear astrophysics. Unfortunately, all the courses in physics department for bachelor students were taught in German. As a result, I chose to take the challenging master courses. Despite the difficulty, I really liked the courses I took there. My favorite course was advanced quantum mechanics. The content of the course contained lots of knowledge that I had learned as a bachelor student, so it was a good way to see if I really understand what I learned before. In addition, I also learned a lot from the German course. The teacher focused more on speaking rather than reading and writing. This was exactly the way of teaching that I expected since speaking was more practical when it comes to living in Germany. Moreover, it helped us to learn German faster. Through the study this semester, I got to know the way of learning in Germany. This was important for me, for I plan to study the graduate school in Germany.

Besides the classes, I also joined many extracurricular activities. The university offered so many options of exercises that I had a hard time deciding which to take. I eventually joined the Jiu-Jitsu and the unicycle club. I had never tried them before going to Germany. I also went bouldering with my friends, which became one of my favorite sports. In Europe, they have an organization called Erasmus Student Network (ESN). Each city or region has one ESN group. I joined a lot of their activities, such as beer tasting, field trips to the vicinity of Darmstadt, and Oktoberfest. It was a quick and easy way to meet other exchange students. I made lots of friends with the activities. Apart from those, I signed up for the buddy program there. However, the university didn't make impetus on this program. I found it hard for exchange students to interact with local students if they couldn't speak German or if they didn't join any sport, and the buddy program would be the only way to do so.

The specific benefits of the exchange can be divided into those four points:

1. Learning new knowledge

Before going to TU Darmstadt, I looked it up on their website to see what courses they would have. I tried to avoid those I had learned in order to maximize the benefits of the exchange.

2. Understanding more about Germany (including learning styles and life)

I was interested in observing the difference between Germany and Taiwan. In terms of studying, it is free whether students want to attend the classes or not. I like the flexibility of attendance because every student can manage their own time. Besides, everyone should be responsible for their choices. There are also some interesting things about daily life there. For example, most of the stores in Germany are closed on

Sundays. For another is their notorious train delay, which I unfortunately encountered some huge ones, but people tended to be accustomed to it and didn't show any dissatisfaction.

3. Learning different cultures

Aside from German culture, joining ESN activities enabled me to know cultures from different countries, and to realize their thoughts about Taiwan or Asia. For instance, having a late lunch or dinner is a prevalent thing for most Spanish people.

4. Accepting different points of view

It is intriguing to know that owing to different historical backgrounds and cultures, people can have various viewpoints. It is more conspicuous if people are talking about politics.

The biggest problem I came across was sickness. A normal appointment could be waited for days or even months. Although the doctor will give you a prescription, you still need to go to the pharmacy and pay for your medicine. Therefore, instead of going to a doctor when someone is sick, it is better to do the prevention beforehand. I once had a severe toothache. It was too hurtful to sleep well, so I made an appointment right after the dental clinic opened. Luckily, they had a space for me at night. I was able to fix the problem within a day.

This exchange gives me reflection on many things. Firstly, I learned how to be more active in class and to socialize more. I am glad that those abilities may help me seize more chances for my career. Another thing is that I learned how to find a balance between life and study. As an exchange student, I could choose how many courses I wanted to take, I also had more free time than local students. It was self-discipline that became crucial when I could decide to do everything. It took me some time to figure out the balance. The last thing I learned was how to be alone. I love to do things together with friends or other people. However, when I was in Germany, this became difficult. Even though I made many new friends there, everyone had different schedules. I felt a bit lonely at first, but I gradually found that sometimes it was also nice to be only with myself. Being alone doesn't mean being lonely. It is a time that I can talk to myself and contemplate. Additionally, I can go on a trip whenever I want if I'm alone.

In my opinion, doing an exchange was one of the best decisions I've ever made. It was not only changing a place to study, but a period that I could find the direction of life and self-growth.