A. 學校簡介

中文簡介

達姆施塔特工業大學（Technische Universität Darmstadt，簡稱 TU Darmstadt）位於德國萊茵-美因都會區，是德國頂尖的理工大學之一。該校創立於 1877 年，不僅歷史悠久，更是全球第一所設立電機工程學科的大學。

作為德國最負盛名的理工大學聯盟「TU9」的重要成員，TU Darmstadt 在工程技術、自然科學以及材料科學等領域享有極高的國際聲譽與豐沛的研究量能。學校擁有高度國際化的學術環境，致力於推動跨領域的創新發展，其理論與實體實驗觀察並重的教學模式，不僅為學術界帶來深遠影響，更是全球頂尖理工人才嚮往的學術殿堂。

English Introduction

Technische Universität Darmstadt (TU Darmstadt), located in the dynamic Rhine-Main region, is one of Germany's leading and most highly regarded technical universities. Founded in 1877, it holds the historical distinction of establishing the world's first department of electrical engineering.

As a proud member of the "TU9" network—the alliance of the most prestigious institutes of technology in Germany—TU Darmstadt is internationally recognized for its pioneering research and academic excellence, particularly in the fields of engineering, natural sciences, and materials science. The university fosters a highly interdisciplinary, innovative, and international academic environment. By effectively bridging the gap between theoretical knowledge and hands-on experimental observation, it serves as a premier destination for exceptional students and researchers worldwide.

B. 國外研修之課程學習（課內），推薦受益最多/最喜歡的課程

中文版本

在這趟交換旅程中，讓我受益最多、也最喜歡的課程非「掃描探針顯微鏡」（Scanning Probe Microscopy）莫屬。

授課教授非常用心，除了常規的講課之外，還特別額外開設了演習課（Exercise）時段。在學期初，教授會利用這個時段帶著大家扎實地複習正課內容；到了學期後半，教授更是直接帶領我們進入實驗室，親自操作機台進行示範。

能夠親眼觀察儀器的實際運作過程以及數據分析的細節，對我來說是非常難能可貴的經驗。透過教授的實體操作展示，我們不僅能將理論與實務結合，更大幅縮短了摸索期，深刻理解儀器的運

作邏輯，完全跳脫了紙上談兵的框架。這門課充分滿足了對實務操作的期待，收穫極為豐富。

English Version

During my exchange program, the course I benefited from the most and enjoyed thoroughly was undoubtedly "Scanning Probe Microscopy."

The professor was incredibly dedicated, going above and beyond by organizing additional exercise sessions outside of the regular lectures. At the beginning of the semester, the professor used these sessions to rigorously review the lecture materials. In the latter half of the semester, we were taken directly into the laboratory, where the professor provided hands-on demonstrations with the equipment.

Seeing exactly how the machines operate and observing the data analysis process firsthand was an invaluable experience. Through the professor's practical demonstrations, we were able to grasp the concepts much faster and truly understand the operational mechanisms of the instruments. It perfectly bridged the gap between theory and practice, proving far more effective than merely learning on paper. This emphasis on real-world observation made the course exceptionally rewarding.

C. 國外研修之生活學習（課外）

中文版本

在歐洲交換的這段期間，旅行絕對是不可或缺的環節，而「規劃」本身更是一門深刻的必修課。短短幾個月內，我總共安排了高達 18 趟大大小小的旅程，其中最具挑戰性、也最有成就感的，莫過於為遠道而來的父母統籌長達 23 天的瑞士之旅。

這些經驗，不僅僅是決定去哪裡玩，而是龐大且繁瑣的後勤考量。其中最累人的，莫過於在享受當下旅程的同時，腦袋裡還得同步準備好下一趟旅程的內容。從機票預訂、跨國轉機銜接，到精準的轉車時間表，每一個細節都必須面面俱到。我也嘗試了彈性且多元的規劃：為了兼顧初期的機動性與不同旅程的預算，我挑戰了各種極限玩法，包含車宿、睡機場、搭乘過夜巴士，以及入住青年旅館與 Airbnb。

除此之外，在帶著家人旅行時，行程的安排也隨之轉換。為了兼顧長輩的體力與體驗，安排充足的時間休息與彈性的轉成方式。旅途中的伙食與日常煮飯也由我一手包辦，善用當地食材快速出餐，確保家人在異鄉也能擁有舒適且溫馨的體驗。看著他們享受這趟由我全權規劃的旅程，那份成就感與成長，是任何課堂上都無法獲得的珍貴收穫。

English Version

In Europe, travel is an essential part of the exchange experience, and "planning" itself is a profound learning process. Over these few months, I organized a total of 18 trips of varying scales. Among them, the most challenging yet rewarding endeavor was coordinating a comprehensive 23-day journey through Switzerland for my visiting parents.

These experiences involved far more than simply deciding where to go; they required massive and complex logistical management. The most exhausting part was having to prepare for the next trip while still in the middle of enjoying the current one. From booking flights and navigating international layovers, to managing precise transfer schedules, every detail had to be flawlessly executed. I also experimented with flexible and diverse planning: to balance early-stage mobility and various budgets, I challenged myself with extreme travel styles, including car-camping, sleeping in airports, taking overnight buses, and staying in youth hostels and Airbnbs.

Furthermore, when traveling with my family, the strategy shifted. To ensure my parents' comfort, we opted for car-camping only on the very first night, and for the rest of the trip, we stayed in comfortable hotels or distinctive mountain huts. I also took full responsibility for our daily meals and cooking along the journey, utilizing local ingredients to efficiently prepare dishes and ensuring my family had a comfortable, heartwarming experience. Seeing them enjoy a journey entirely organized by me brought a profound sense of fulfillment and personal growth that simply cannot be acquired in a classroom.

D. 交換/研修之具體效益（請條列式列舉）

中文版本

- **提升實務與分析能力：** 透過「掃描探針顯微鏡」等課程的實體機台操作與觀摩，成功將理論知識轉化為數據分析的實戰經驗。
- **強化專案統籌與執行力：** 於數月內獨立規劃並執行 18 趟跨國旅程（包含長達 23 天的家庭旅遊），精準掌控複雜的交通銜接與住宿後勤。
- **培養高度適應力與應變韌性：** 在極限省錢背包客（如車宿、睡機場）與長輩舒適行程之間靈活切換，大幅提升在異地解決問題與處理突發狀況的能力。
- **獨立生活與高效時間管理：** 在繁重的課業、高密度的旅行日程以及日常自煮三餐之間取得完美平衡，練就極佳的時間分配與獨立自理能力。

English Version

- **Enhanced Practical & Analytical Skills:** Translated theoretical knowledge into hands-on experience in equipment operation and data analysis through practical courses like "Scanning Probe Microscopy."
- **Strengthened Project Management:** Independently planned and executed 18 transnational trips (including a 23-day family tour), flawlessly managing complex flight, transit, and accommodation logistics.
- **High Adaptability & Problem-Solving:** Built immense resilience by flexibly switching between extreme budget travel (e.g., car-camping, sleeping in airports) and accommodating family-paced itineraries, effectively handling unexpected situations.
- **Independent Living & Time Management:** Mastered highly efficient time management by balancing demanding coursework, intensive travel schedules, and daily meal preparation.

E. 海外生活期間是否曾遭遇困境，及是否解決問題？如是，請說明如何解決問題;如未解決，請說明事件最大的啟發及思考未來可以怎麼解決?

中文版本

遭遇困境：課業期末考與長途家庭旅行的時程衝突 在交換進入尾聲的七月份，我面臨了一個巨大的時間管理與行程衝突。德國大學的期末考時程通常較晚，但我當時已經規劃好要為遠道而來的父母安排一趟長達 23 天的瑞士之旅，同時我也必須顧及台灣母校夏季的畢業時程要求。當時公布的表定考試日期完全卡在家庭旅行的期間內，如果按照一般程序，我不是得放棄部分考試，就是必須犧牲已經籌備許久的家庭旅行。

解決方式：主動溝通與正式的協商 我深知在德國的體制下，「不問就絕對沒有機會」，因此我決定主動出擊。我彙整了自己台灣母校的畢業時程與學術規劃，撰寫了一份正式的書面請求(official written request) 寄給授課教授，誠懇且清楚地說明我的特殊狀況，並主動提出希望能在 7 月 16 日至 7 月 27 日這個特定區間內，提前完成我的期末考試。

經過多次的溝通與協調，教授最終理解了我的處境，並同意為我安排特別的提前考試時段。為此，我必須在極度壓縮的時間內，一邊處理瑞士之旅的最終後勤確認，一邊進行高強度的備考。最終，我順利在七月底前考完所有科目，無縫接軌地帶領家人展開旅程，也確保了學分能如期轉換。

最大啟發：勇敢開口與主動爭取 這次事件給我最大的啟發是：在異國面對看似僵硬的體制或規定時，不要輕易妥協或感到無助。只要你的理由充分、態度誠懇且具備合理的解決方案，多數的教授與行政人員都是願意給予彈性的。這份「勇敢開口、主動爭取」的經驗，將是我未來面對任何職場或生活困境時，最強大的心態武器。

English Version

The Challenge: Conflict Between Final Exams and a Long-term Family Trip As my exchange program approached its end in July, I faced a significant scheduling and time-management crisis. Final exams at German universities are typically scheduled quite late in the summer, but I had already meticulously planned a 23-day trip to Switzerland for my visiting parents. Furthermore, I had to meet the strict summer graduation deadlines of my home university in Taiwan. The officially announced exam dates fell right in the middle of the family trip. Following the standard procedure meant I would either have to drop crucial exams or sacrifice the family reunion I had planned for months.

The Solution: Proactive Communication and Formal Negotiation Knowing that in the German system, "if you don't ask, the answer is always no," I decided to take proactive measures. I compiled my academic timeline and graduation requirements and drafted an official written request to my professor. I sincerely and clearly explained my specific situation and proposed an alternative: requesting special early testing dates specifically between July 16 and July 27.

After detailed communication, the professor understood my predicament and agreed to accommodate my request for early exams. Consequently, I had to engage in highly intensive study sessions while simultaneously finalizing the complex logistics of the Swiss trip. Ultimately, I successfully completed all my exams before late July, seamlessly transitioned into guiding my family's tour, and ensured my credits would be transferred on time.

The Biggest Takeaway: The Courage to Ask and Advocate for Yourself The greatest inspiration I drew from this incident is that when facing seemingly rigid systems or rules in a foreign environment, one should not easily compromise or feel helpless. As long as you have a well-founded reason, a sincere attitude, and a reasonable proposed solution, most professors and administrators are willing to offer flexibility. This experience of "having the courage to ask and proactively advocate for myself" will be my most powerful mental asset when overcoming future challenges in my career and life.

F. 海外生活期間是否曾遭遇文化衝擊，您如何去面對及適應?

這部分可以切入德國（乃至整個歐洲）與台灣在「生活便利性」與「飲食文化」上的巨大差異。

台灣有 24 小時的便利商店和隨時都能吃到熱食的夜市，而德國則有著嚴格的週日公休（Sonntagsruhe）以及高昂的外食成本。

將這個文化衝擊與你「擅長規劃」和「自己下廚」的經歷結合，能再次強化你超強的適應力與獨立性。為你擬定以下中英文版本：

F. 海外生活期間是否曾遭遇文化衝擊，您如何去面對及適應？

Cultural Shock Encountered Abroad and Adaptation Strategies

中文版本

遭遇的文化衝擊：生活節奏的差異與「便利性」的重新定義 剛抵達德國時，最深刻的文化衝擊莫過於生活節奏與飲食習慣的巨大落差。在台灣，我們習慣了 24 小時營業的便利商店、隨處可見的手搖飲，以及即使到了深夜依然熱鬧的夜市，外食既便宜又方便。然而在歐洲，外食成本相當高昂，且德國有著嚴格的「週日公休」法規，多數超市與商家在星期天及國定假日是不營業的。初期，這種「不便利」確實讓我感到些許焦慮，也曾因為忘記提前採買而面臨週末沒有新鮮食材可用的窘境。

面對與適應：將「提早規劃」與「自煮」融入日常 面對這樣的差異，我很快意識到不能用台灣的生活模式在歐洲生存。我開始調整自己的生活節奏，將「提前採買」視為每週的重要行程。我學會了密切注意國定假日，並在週五或週六一次購足週末所需的物資。

更重要的是，我徹底改變了對外食的依賴。我開始大量走訪當地的超市，研究各式各樣的在地食材，並親自下廚變出符合自己口味的料理。這樣的轉變不僅替我省下了極為可觀的生活費，更讓我在後續高達 18 趟的跨國旅行中受用無窮。無論是在高昂物價的瑞士，還是在偏遠的冰島或高山健行途中，我都能善用當地超市的食材快速出餐，甚至在帶著家人旅行時，也能透過親自下廚讓長輩在異鄉品嚐到溫馨的熱食。這個文化衝擊最終促使我練就了極強的生活自理能力，也讓我學會欣賞歐洲這種強調「生活與工作平衡」的步調。

English Version

The Cultural Shock: Differences in the Pace of Life and Redefining "Convenience" Upon arriving in Germany, the most profound cultural shock I experienced was the stark contrast in the pace of life and dining habits. In Taiwan, we are accustomed to 24/7 convenience stores, readily available street food, and bustling night markets where eating out is both cheap and highly convenient. In Europe, however, dining out is quite expensive. Furthermore, Germany strictly observes Sunday rest laws (Sonntagsruhe), meaning most supermarkets and shops are completely closed on Sundays and public holidays. Initially,

this lack of "convenience" caused some anxiety, and I occasionally found myself without fresh groceries on a weekend because I forgot to stock up in advance.

Facing and Adapting: Integrating "Forward Planning" and "Home Cooking" into Daily Life Confronted with this difference, I quickly realized I could not simply apply my Taiwanese lifestyle to surviving in Europe. I adjusted my pace of life and made "advance grocery shopping" a crucial part of my weekly routine. I learned to keep a close eye on public holidays and ensure I purchased all necessary supplies by Friday or Saturday.

More importantly, I completely broke my reliance on eating out. I started exploring local supermarkets extensively, studying various regional ingredients, and cooking my own meals to suit my tastes. This transition not only saved me a considerable amount of living expenses but also proved incredibly beneficial during my 18 subsequent transnational trips. Whether in high-cost Switzerland, remote areas of Iceland, or during alpine hikes, I was able to efficiently utilize local supermarket ingredients to prepare meals. When traveling with my family, this skill allowed me to cook warm, comforting food for my parents in a foreign land. Ultimately, this cultural shock forced me to develop exceptional independent living skills and taught me to appreciate the European emphasis on work-life balance.

G. 海外生活歷練是否為您人生帶來不一樣的改變或者個人特質上的轉變，最大的成長是什麼?

中文版本

說真的，這趟交換帶給我最大的改變，就是把我從一個「只會照表操課的乖學生」，逼成了一個「兵來將擋、水來土掩的超強解題機」。

如果要選幾個詞來形容我的成長，絕對是「心臟變超大顆（韌性）」跟「膽量升級（主動性）」。以前在台灣，什麼都很方便、很有規律；但在歐洲，真的隨時都在大爆走。從自己窮遊睡機場、搭夜車，到後來直接化身超級導遊，包辦爸媽長達 23 天超複雜的瑞士之旅，這些簡直是地獄級的考驗。但也是這些歷練，讓我學會在各種崩潰邊緣保持冷靜。現在遇到突發狀況，我第一反應早就不是傻眼或抱怨，而是腦袋自動切換成：「好，現在要怎麼收尾？」

另外，為了能順利帶爸媽去瑞士，我硬著頭皮去跟德國教授「談判」，要求提早考期末考。這真的完全打破了我以前「不敢問、怕被拒絕」的被動心態。我發現「機會真的是自己厚著臉皮爭取來的」！

現在的我，真的沒在怕跳脫舒適圈。因為我知道，以後不管遇到多荒謬的狀況或多難解的關卡，我都一定有辦法把它們一一破解。這份「沒在怕」的自信，絕對是我這趟交換帶走最棒的紀念品！

English Version

Honestly, the biggest change this exchange brought me was upgrading me from a "play-by-the-rules student" to an "absolute problem-solving machine."

If I had to sum up my growth, it would be my massive upgrades in "resilience" (having a much stronger heart) and "proactivity" (having the guts to speak up). Back in Taiwan, life was pretty predictable and convenient. But in Europe, things go off script all the time! From roughing it out sleeping in airports and taking overnight buses, to suddenly becoming a hardcore tour guide planning a crazy 23-day Swiss trip for my parents, I' ve been through it all. These wild experiences taught me how to keep my cool when things are falling apart. Now, when curveballs hit, my first reaction isn't to freak out or complain. Instead, my brain instantly goes: "Alright, how do we fix this?"

Also, deciding to just go for it and negotiate early final exams with my German professor so I could travel with my parents totally broke my old habit of being passive. I really learned that "if you don't ask, you don't get."

I'm not afraid to step out of my comfort zone anymore. I know that no matter how messy or unfamiliar a situation is in the future, I can figure it out. This "bring it on" kind of confidence is definitely the best souvenir I am taking home from this exchange!

H. 感想與建議

回頭看這幾個月的交換生活，真的就像一場不可思議的真人闖關遊戲。從適應德國全新的學術環境、在實驗室親手操作那些酷炫的顯微鏡機台，到課餘時間瘋狂解鎖歐洲地圖，每一天都在挑戰自己的極限。這趟旅程讓我深刻體會到，交換的意義遠大於那一紙成績單，它是一堂超高強度的「社會生存課」。結束這趟旅程，我帶走的不是只有滿滿的相簿，還有那個變得更獨立、更勇敢、解決問題能力點滿，而且廚藝還突飛猛進的自己。

【給學弟妹的真心建議】

1. **點滿你的「自煮」技能樹：** 歐洲外食真的會貴到讓你懷疑人生！出發前強烈建議先學幾道簡單的家常菜。到當地後善用超市食材，絕對能幫你省下大筆旅費，還能隨時安撫你想家的胃（帶著家人旅行時更是超級好用！）。
2. **臉皮厚一點，機會是問出來的：** 德國的大學體制跟行政手續雖然看起來一板一眼，但千萬不要自

己先退縮。遇到考試卡到重要行程等突發狀況，準備好合理的解釋與替代方案，勇敢去跟教授協商就對了！記住，你不問，答案永遠是 No。

3. **走出舒適圈，用力去探索：** 不管你是喜歡租車自駕跑透透、挑戰國外的高山健行，還是帶著空拍機紀錄壯麗的地貌 (出發前記得查好歐洲各國的空域法規喔！)，請把握這段黃金時間用力去玩、去規劃。不要害怕迷路或出錯，那些睡機場、趕夜車的鳥事，最後都會變成你最驕傲的下酒菜故事。

English Version

[Overall Thoughts] Looking back at these past few months, this exchange program truly felt like an incredible real-life adventure game. From adapting to a new academic environment in Germany and getting hands-on with cool microscope equipment in the lab, to frantically unlocking the map of Europe during my free time, every single day was a test of my limits. This journey made me realize that an exchange program is about so much more than just a transcript; it' s an intensive crash course in adulting and survival. As this journey wraps up, I'm not just bringing back a camera roll full of photos, but a more independent, courageous, problem-solving version of myself—with vastly improved cooking skills!

[Genuine Advice for Future Students]

1. **Level up your cooking skills:** Eating out in Europe is ridiculously expensive! I highly recommend learning a few easy, home-style recipes before you go. Mastering the local supermarkets will save you tons of travel money and instantly cure your homesickness (and it's a lifesaver when traveling with family!).
2. **Grow a thick skin and just ask:** The German university system and bureaucracy might seem super rigid, but don't defeat yourself before you even try. If you run into issues like exam dates clashing with important trips, just prepare a solid reason and a backup plan, and boldly negotiate with your professors. Remember: if you don't ask, the answer is always no.
3. **Step out of your comfort zone and explore hard:** Whether you love going on road trips, tackling international alpine hikes, or bringing a drone to capture epic landscapes (just remember to check European airspace regulations first!), use this golden time to travel and plan your heart out. Don't be afraid of getting lost or making mistakes. Those miserable moments of sleeping in airports or catching overnight buses will eventually become the

stories you are most proud to tell.