

資訊工程學系「特殊選才」： 「資訊專長組」以創新與研發能力為主，「資 安組」著重在相關的成就、興趣以及潛力

文／杜懿詢



大學升學管道多元，除了需採計學測的繁星、分發與個人申請之外，為了適性揚才，教育部自 107 年起，將「特殊選才」納入正式升學管道，提供各校系依據自身所需，自訂選才徵選辦法，徵選具有特殊成就的專才或偏才學生，以及上進的弱勢學生。雖然截至去年（113 年度）為止，全台僅有 59 所大專院校釋出 1781 個招生名額，約只佔 1%~2% 的總入學名額，但「特殊選才」不需採計學測分數，也不限定報考家數，對於大學或是學生來說，是個找到適合彼此的絕佳機會！

國立陽明交通大學資訊工程學系洪瑞鴻教授表示，資訊工程學系提供特殊選才二個不同性質的入學管道：資訊專長的「資訊工程學系」與資安專長的「資訊工程學系（資安組）」，相較於傳統入學管道的學生，期待特殊選才進入資訊工程學系的學生，更能展現多元能力的獨特性和特殊性，與本系學生激盪出創新的火花。而去年首次新增的「資安組」，就招收到了就讀技職體系的資安高材生：蔡語宸。

父親是軟體工程師、母親是國小特教老師的蔡語宸，從小就熟悉 3C，國中時期因玩遊戲而開始自學架設伺服器，曾用 Google 雲端修改寶可夢模組，讓一百多位玩家一起玩。因為興趣，蔡語宸國中畢業之後，選擇就讀台中高工資訊科，除了在高一時就開始參與教育部資安人才培育計畫之外，經歷高職三年有系統地學習程式和網路架構基礎，並使用學校二十多萬伺服器設備不斷練習之後，蔡語宸也繳出亮眼的成績；不但和夥伴組隊參賽，奪得 111 年行政院數位發展部

金盾獎資安競賽亞軍，更拿下勞動部第五十二屆全國技能賽網路安全職業類金牌，也因此獲得資訊工程學系資安組首屆特殊選才唯三名名額中的一名入學生。

由此也可看出，特殊選才管道在徵選時的特殊標準。洪瑞鴻教授表示，申請資安專長的學生，會著重在「資安領域」是否展現相關的成就、興趣以及潛力，至於申請資訊專長的學生，則希望能看見連結資訊領域科技之「創新」與「研發」所需的能力。整個評選過程主要以學生所呈現的申請資料以及口試的表現做綜合評估，評估學生在主動求知、自學能力、發現問題、解決問題、表達呈現、團隊合作、實務經驗、資訊領域專業知識技能、社群貢獻、外語能力以及國際觀等等面相的程度以及潛力。

洪瑞鴻教授也提供有意申請的學生一些準備的建議：在競賽與課外活動參與方面，儘量以政府單位或是學校舉辦的大型競賽或活動為主；而撰寫申請資料時，以明確條列可佐證之特殊表現或是具體成果，呈現高資訊密度的簡扼篇幅，讓評選委員能夠對能力與表現進行正確評估。此外，同學也需要對自己所提供的審查資料熟悉，並對於自己特殊表現相關的基礎知識、參與經驗、能力強項和個人特質多加準備，這樣在短暫的口試時間裡，才不會因過去表現紀錄或是基本原理等關鍵問題上回答出錯，對錄取造成影響。

資訊工程學系特殊選才時間落在每年的九月至十月，歡迎此些領域的專才與偏才學生前來申請，加入國立陽明交通大學一起交流！

CS Special Talent Admission: “Computer Science Group” – Focuses on Innovation and R&D Capabilities “Cyber Security Group” – Emphasizes Relevant Achievements, Interests, and Potential.

There are various avenues for college admission, such as the Star Plan, admission distribution, and individual applications. These methods require students to take the General Scholastic Ability Test (GSAT). Since the 107th academic year, the Ministry of Education has introduced "Special Talent Admission" as part of the formal admission process, which allows colleges to tailor their selection criteria to attract students with exceptional achievements, unique talents, and those who come from disadvantaged backgrounds but show potential. Before the last academic year (113), only 59 universities in Taiwan offered 1,781 admission slots, representing just 1% to 2% of the total enrollment slots. However, with the introduction of the "Special Talent Admission" program, GSAT scores are no longer considered, and there are no restrictions on the number of applications an individual can submit, creating an excellent opportunity for both universities and students to find a mutually beneficial match.

Professor Jui-Hung Hung from the Department of Computer Science at National Yang Ming Chiao Tung University has emphasized the availability of two distinct admission pathways for students possessing special talents. These pathways encompass the "Computer Science Group," which focuses on computer science expertise, and the "Cyber Security Group," dedicated to cybersecurity. The intention behind these specialized routes is to attract students with a broader spectrum of skills and unique attributes compared to those admitted through conventional means. This diverse student body is expected to spark innovation through collaborative endeavors within the department. Notably, the recently introduced "Cyber Security Group" enrolled an exceptional talent, Yu-Chen Tsai, from vocational education systems last year.

Yu-Chen Tsai, whose father is a software engineer and his mother is an elementary school special education teacher, has been immersed in 3C since his early years. In junior high, he developed a passion for gaming and began self-learning server setup. One of his notable achievements was modifying Pokémon modules on Google Cloud to enable multiplayer gaming for over a hundred participants. Driven by his interests, he pursued further studies in the Department of Computer Science at Taichung Municipal Taichung Industrial Senior High School after completing junior high. Throughout his high school years, he actively participated in the Ministry of Education's cybersecurity talent development program, focusing on programming and network architecture. He consistently practiced using the school's server infrastructure valued at over two hundred thousand.

Tsai's outstanding skills led him to secure second place with his team in the 2023 Cyber Security Competition by the Ministry of Digital Affairs. Additionally, he won the gold medal in the 52nd National Skills Competition – Cyber Security, organized by the Ministry of Labor. Consequently, he earned one of the three special admission slots in the Cyber Security group of the Department of Computer Science.

Tsai's story highlights the unique standards for recruiting talented individuals throughout the selection process. Professor Hung emphasizes that candidates focusing on cybersecurity must demonstrate their achievements, passion, and potential in the field. In contrast, candidates with a background in computer science are evaluated based on their ability for 'innovation' and 'research and development,' ensuring alignment with advancements in the field. The selection process rigorously assesses each candidate's application and interview performance, offering a holistic evaluation of their abilities. This evaluation includes their capacity for active inquiry, self-learning, problem identification and solving, effective communication and presentation, teamwork, practical experience, mastery of computer science knowledge and skills, community engagement, language proficiency, and global perspective.

Professor Hung also offers guidance for applicants, emphasizing the importance of participating in major competitions or events hosted by government bodies or academic institutions. When preparing application documents, it's crucial for students to succinctly highlight their achievements, ensuring that the information presented is dense yet clear, allowing the selection committee to accurately assess their capabilities and accomplishments. Furthermore, applicants must have a deep understanding of the materials they submit and should be well-prepared to discuss their specialized knowledge, participation in significant events, strengths, and personal characteristics in depth. This comprehensive preparation significantly reduces the chance of mistakes during brief interview sessions, thus avoiding potential setbacks in admission caused by inaccuracies in discussing past achievements or fundamental concepts.

Annually, from September to October, the Department of Computer Science at National Yang Ming Chiao Tung University proudly organizes its CS Special Talent Admission program. This initiative warmly welcomes students who possess unique skills and specializations in the field of computer science and cybersecurity to apply and join our dynamic community, fostering mutual exchange and growth.