2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

77 人 participants

學生參與國際學術會議

Student participation in international academic conferences

147 門 courses

開設模組化課程

Modular courses offered

11 人 participants

學生參與校外實習

Student participation in off-campus internships

252 門 courses

開設專題導向課程、實作課程

Project-based and practical courses offered

669 人 participants

學生參與自主學習課程或科學專案活動

Student participation in self-directed learning courses or scientific project activities

組織與制度調整面向 Organizational and Institutional Adjustment

- 理學院執行「大學校院以學院為核心教學單位試辦計畫」，共計設置3個院設班別。

  The College of Science implemented the Pilot Program for Colleges as the Core Teaching Unit in Universities, establishing a total of three college-based class divisions.

理學院應用科學國際博士班
International Ph.D. Program in Applied Science of College of Science

2 位 people

在學生

enrolled students

1 位 people

專任教師

full-time faculty member

5 位 people

支援授課教師

supporting instructors

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

組織與制度調整面向　Organizational and Institutional Adjustment

理學院應用科學國際博士班
International Ph.D. Program in Applied Science of College of Science

理學院應用科學國際碩士班
International Master Program in Applied Science of College of Science

1 位 people　**專任教師** full-time faculty member

2 位 people　**畢業生** graduate

截至113學年度 第2學期
As of the second semester of Academic Year 2024 (AY 113)

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

組織與制度調整面向　Organizational and Institutional Adjustment

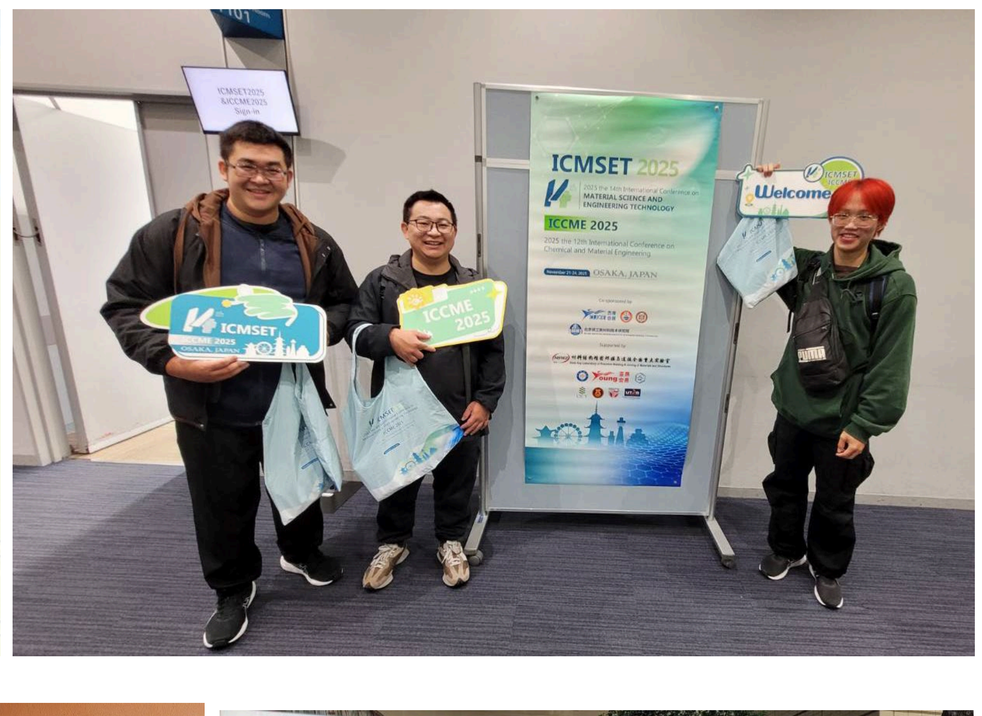
理學院半導體材料科學碩士班
Semiconductor Materials Science in Master Program of College of Science

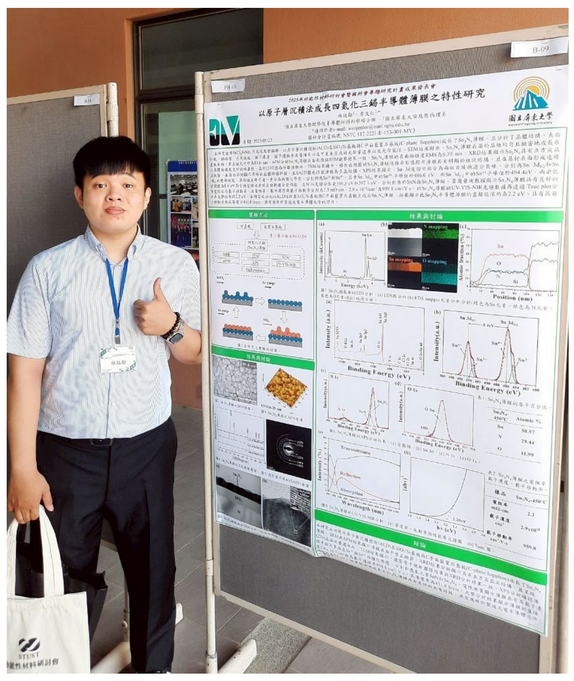
1 位 people — **專任教師 full-time faculty member**

7 位 people — **在學生 enrolled students**

4 位 people — **畢業生 graduate**

截至113學年度 第2學期
As of the second semester of Academic Year 2024 (AY 113)



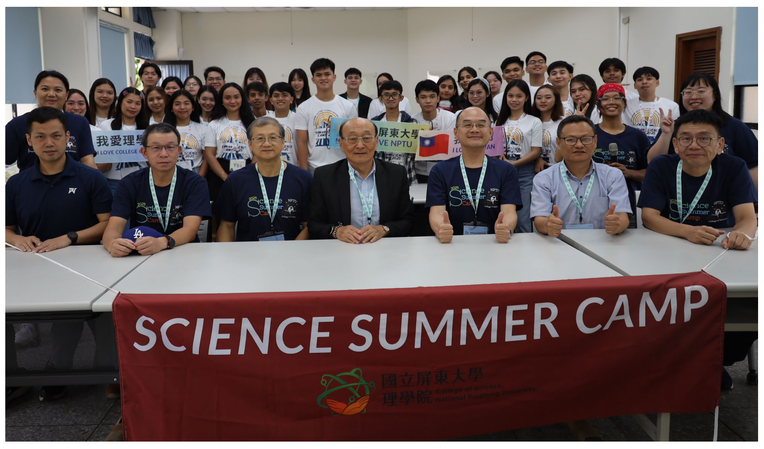


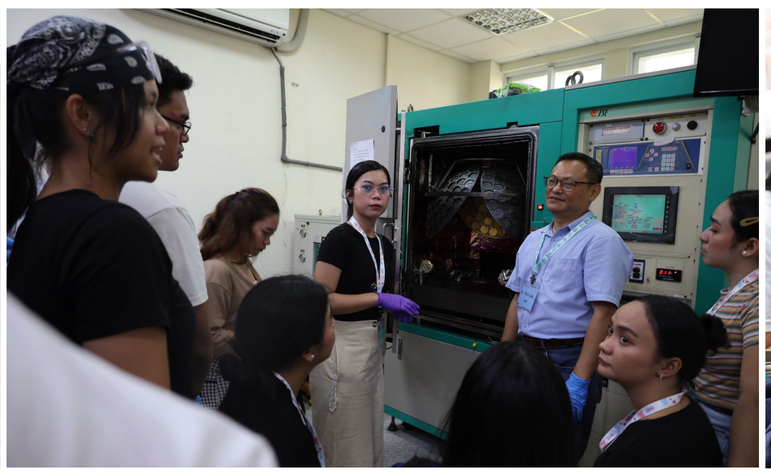
2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

組織與制度調整面向　Organizational and Institutional Adjustment

- 藉由辦理2025科學菲常好玩假日學校、2025全國大專暨高中青年自然科學辯論競賽、2025 SDGs Talk 永續行動獎、國際院際學術交流活動及院中長程計畫各式招生活動等，持續接觸潛在學生，並進行師資整合及課程開設相關事宜。

Through activities such as the 2025science summer camp, 2025 National Collegiate and High School Youth Science Debate Competition, 2025 SDGs Talk Award, international intercollegiate academic exchange programs, and various recruitment events under the college’ s mid- to long-term development plans, the College continues to engage with potential students while coordinating faculty integration and curriculum development.





2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

⬢ 理學院課程「跨領域學習」推動方案

Interdisciplinary Learning Program of the College of Science

現階段已完成「科學概論」新增課程作業，此課程整合物理、化學、數學、科學傳播等領域知識，以提升學生解決複雜問題的能力。同時，為彌補學生在入學前缺乏科學專業領域EMI英語授課之學習經驗，將引入專業學術英語（ESAP）模式，幫助學生建立學術英語基礎，協助其銜接未來專業課程英語授課的學習情境。

At the current stage, the College has completed the development of a new course, "Introduction to Science," which integrates knowledge from the fields of physics, chemistry, mathematics, and science communication to enhance students' ability to solve complex problems. Meanwhile, to address students' limited prior experience with English-Medium Instruction (EMI) in scientific disciplines before admission, the English for Specific Academic Purposes (ESAP) approach will be introduced. This aims to help students build a foundation in academic English and facilitate their adaptation to English-taught professional courses in the future.

⬢ 理學院課程「運動科學領域學習」推動方案

Curriculum Planning – "Sports Science Learning" Program of the College of Science

現階段已完成「運動學概論」新增課程作業，此課程為培養學生在運動科學領域的專業知識與實務技能。有鑑於大多數學生在入學前缺乏運動科學專業領域EMI英語授課之學習經驗，將研議專業學術英語（ESAP）導入課程之可行性，以提升學生的溝通能力，進而協助其順利銜接未來運動科學相關專業課程英語授課的學習情境。

At the current stage, the College has completed the development of a new course, "Introduction to Kinesiology," designed to cultivate students professional knowledge and practical skills in the field of sports science. Given that most students have limited prior experience with English-Medium Instruction (EMI) in sports science before admission, the College is exploring the feasibility of incorporating the English for Specific Academic Purposes (ESAP) approach into the curriculum. This initiative aims to enhance students' communication abilities and facilitate a smooth transition to future English-taught professional courses in sports science.

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

● 理學院配合重要政策推動研究、專題及社群方案

Research, Special Projects, and Community Programs in Alignment with Key National Policies

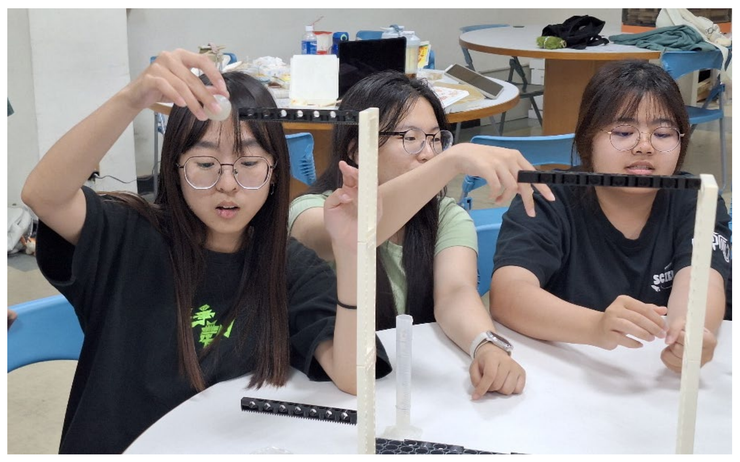
本校鄰近屏東科學園區，園區以智慧農醫、綠色材料、太空科技、其他新興科技（如：淨零科技、智慧機械及低碳移動等）為發展主軸。理學院期望發展成為培育在地特色人才之核心基地，現階段透過研究、專題、社群、自主學習等途徑，結合SDGs永續發展目標、5+2產業創新計畫、六大核心戰略產業、2050淨零排放路徑等重要政策，提供創新與專業的課程內容，以培養學生成為具社會責任感、創新能力及永續發展觀念的優秀人才。

The College of Science aligns its initiatives with major national policies. Located near the Pingtung Science Park, which focuses on the development of smart aeromedicine, green materials, space technology, and other emerging technologies (such as net-zero technologies, intelligent machinery, and low-carbon mobility), the College aims to become a core hub for cultivating locally specialized talent. At the current stage, through research projects, special topics, academic communities, and self-directed learning activities, the College integrates key policy frameworks such as the UN Sustainable Development Goals (SDGs), the 5+2 Industrial Innovation Plan, the Six Core Strategic Industries, and the 2050 Net-Zero Emission Pathway. These efforts provide innovative and professional curricula designed to nurture students into outstanding individuals with social responsibility, innovative capability, and a commitment to sustainable development.

8 組
groups

師生研究社群

Faculty-Student Research Community



2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

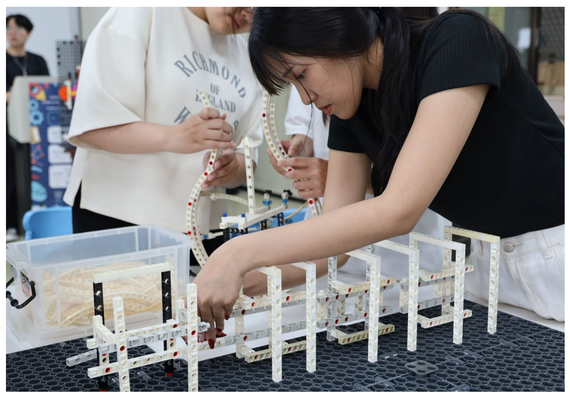
課程規劃面向　Curriculum Planning

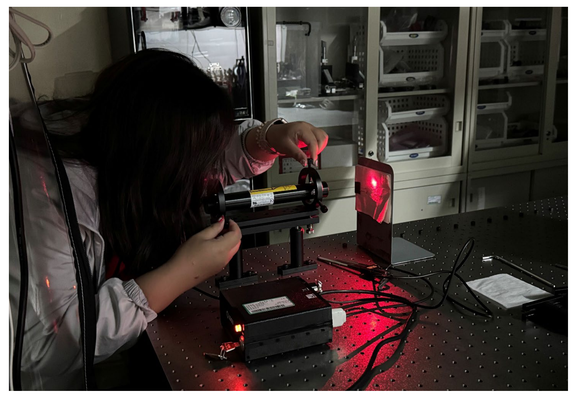
114年1月成立
January 2025 established

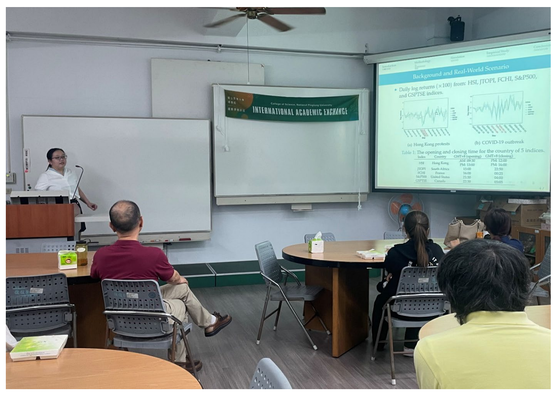
Green Nano研究中心
Green Nano Research Center

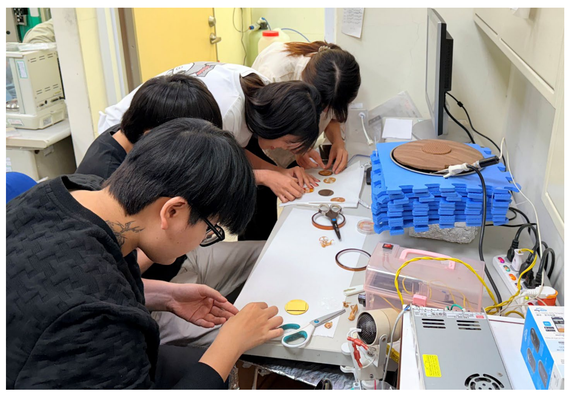
10 場 sessions

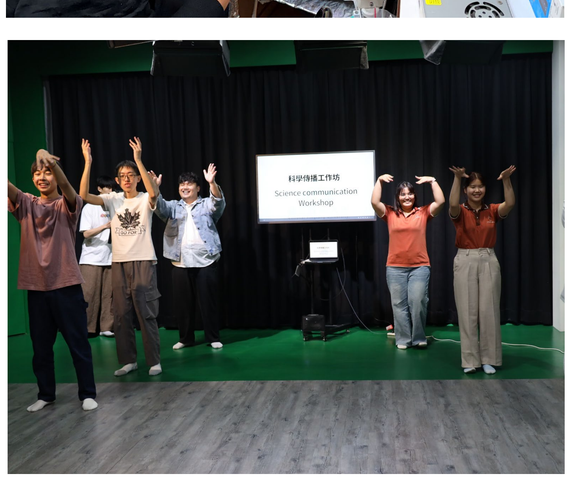
科學創客自造工作坊
Science Maker Workshops





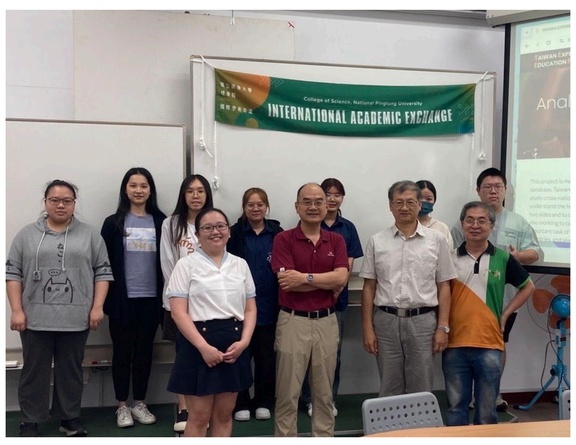


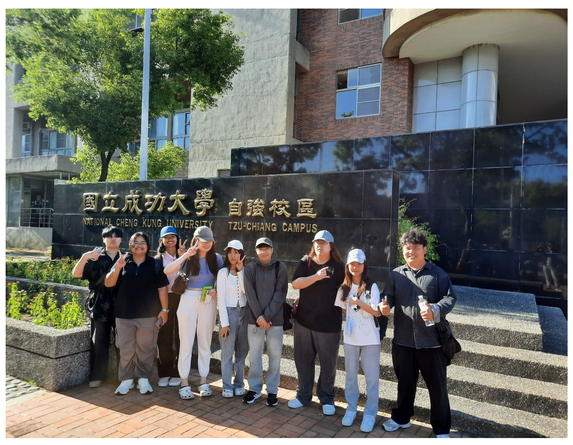


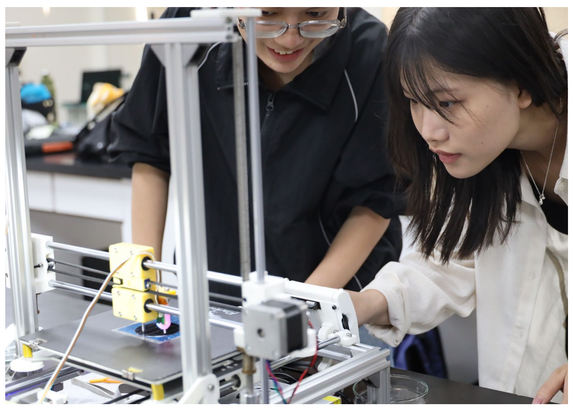


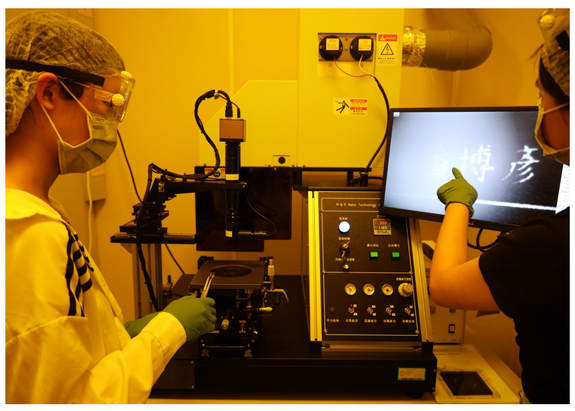
2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

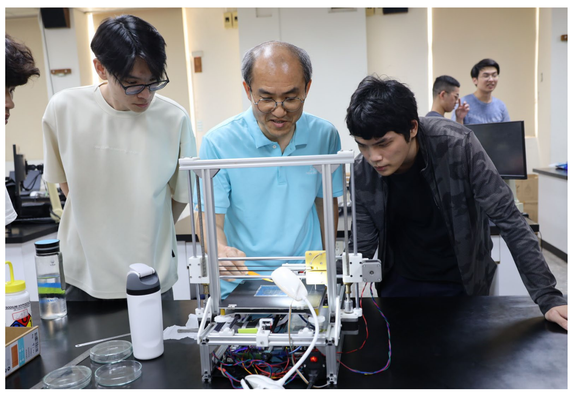
課程規劃面向　Curriculum Planning

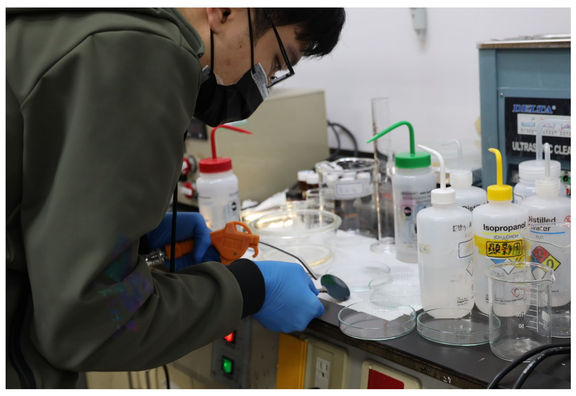












2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

⬢ 半導體產業素養課程方案
Semiconductor Industry Literacy Program

應用科技產業學分學程為理學院以院為主所設置的跨領域屬性學分學程，現已完成具半導體產業素養之「光電半導體材料」、「積體電路模組製程技術」及「奈米材料之特性與應用」新增課程作業，並於114-1開設「積體電路模組製程技術規劃」，未來將持續依學習需求開設相關課程。

The Applied Technology Industry Program is an interdisciplinary program established by the College of Science. The College has completed the development of new courses that cultivate semiconductor industry literacy, including “Optoelectronic Semiconductor Materials,” “Integrated Circuit Module Process Technology,” and “Properties and Applications of Nanomaterials.”
In the first semester of Academic Year 2025 (114-1), the course “Planning of Integrated Circuit Module Process Technology” was officially launched. Related courses will continue to be offered in response to students’ learning needs.

⬢ 提升科學探究策展能力推動方案
Program for Enhancing Science Inquiry and Exhibition Design Competence

為培養學生依不同受眾需求，設計科學探究活動與互動展品，強化人文關懷、跨域協作與自主學習能力。透過參訪博物館與展場，學習其展示規劃與教育運作，進而掌握具科學性、人文關懷、跨域融合及雙語展示的策展與推廣能力。114年度提升科學探究策展能力活動共計辦理6場。

This program aims to cultivate students’ abilities to design science inquiry activities and interactive exhibits tailored to diverse audiences, thereby strengthening their humanistic awareness, interdisciplinary collaboration, and self-directed learning skills.
Through visits to museums and exhibition venues, students learn about exhibition planning and educational operations, gaining the capability to curate and promote exhibits that embody scientific rigor, humanistic concern, interdisciplinary integration, and bilingual presentation.
In 2025 (Academic Year 114), a total of six activities were held under this initiative.

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

● 專業課程結合國際會議
Integration of Professional Courses with International Conferences

鼓勵教師引導學生將專業知識應用於實驗研究，並將成果投稿至國際會議發表，拓展國際視野，提升學術交流與合作能力。學生可藉此深化專業理解，展示創新成果，增強全球競爭力。

Faculty members are encouraged to guide students in applying their professional knowledge to experimental research and to submit their findings for presentation at international conferences, thereby broadening their global perspectives and enhancing their academic exchange and collaboration skills. Through this process, students deepen their professional understanding, showcase innovative achievements, and strengthen their global competitiveness.

2 位 people

學生獲國科會補助國內研究生出席國際學術會議

Students received NSTC (National Science and Technology Council) grants for domestic graduate students to attend international academic conferences.

14 位 people

學生獲本校研發處出席重要國際會議發表論文補助

Students received Research and Development Office grants from the University to present papers at major international conferences.

61 位 people

學生獲高教深耕計畫獎助學金補助出席國際學術會議

Students received Higher Education SPROUT Project scholarships to participate in international academic conferences

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

開設模組化課程

Modular Course Development

為培養學生扎實的科學基本素養，於理學院共同課程開設基礎學科課程，強化其學術基礎與科學思維。同時，為鼓勵跨領域學習，亦開設多元化的微學分課程，協助學生拓展知識視野，培養多面向的學習能力。此外，為培養具備多元技能的科技產業人才，理學院以院為主體設置跨領域應用科技產業學分學程。通過開設豐富的理工課程，學生能在學習過程中探索不同專業領域，進行跨學科的學習與實踐，從而確定最適合自己的學習方向及專題研究領域。理學院所屬各系根據專業領域、系所特色與未來發展，設置9個系特色專長學分學程。這些學分學程不僅幫助學生深入學習專業知識，顯著提升其就業競爭力，使其能在科技核心產業中脫穎而出。透過多樣化的學習機會，理學院期望學生能夠獲得必要之技能與知識，為未來的職業發展奠定堅實的基礎。

To cultivate students’ solid foundation in scientific literacy, the College of Science offers fundamental discipline courses within its general curriculum to strengthen students’ academic foundations and scientific thinking skills.

At the same time, to encourage interdisciplinary learning, the College provides a variety of micro-credit courses that help students broaden their knowledge horizons and develop diverse learning capabilities.

In addition, to nurture technologically skilled professionals with interdisciplinary competencies, the College has established an Applied Technology Industry Program, organized at the college level. Through a wide range of science and engineering courses, students are encouraged to explore different professional fields, engage in cross-disciplinary learning and practice, and identify their most suitable areas for study and research specialization.

Based on their academic characteristics, areas of expertise, and future development goals, the departments under the College of Science have developed nine specialized departmental credit programs. These programs not only deepen students’ professional knowledge but also enhance their employability and competitiveness, enabling them to stand out in key technology industries.

Through these diverse learning opportunities, the College of Science aims to equip students with the essential skills and knowledge needed to build a strong foundation for their future career development.

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

55 門 courses

開設理學院共同課程

College of Science
Common Courses

1 門 course

開設理學院微學分課程

College of Science
Microcredit Program

65 門 courses

開設系特色專長學分學程課程

Departmental
Specialized Credit
Courses

26 門 courses

開設理學院應用科技產業學分學程課程

College of Science
Applied Science and
Technology Industry
Credit Courses

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

理學院
College of Science

應用科技產業學分學程
Applied Technology Industry Program

應用物理系
Department of Applied Physics

半導體製程學分學程
Credit Program in Semiconductor Processing

應用數學系
Department of Applied Mathematics

精算財金學分學程
Credit Programs in Actuarial Finance

科學計算學分學程
Credit Programs in Scientific Computing

應用化學系
Department of Applied Chemistry

應用材料學分學程
Credit Program in Applied Materials

應用生物科技學分學程
Credit Program in Applied Biotechnology

科學傳播學系
Department of Science Communication

科普活動規劃學分學程
Credit Program in Science Program Planning

科普媒體寫作學分學程
Credit Program in Science Media Writing

體育學系
Department of Physical Education

傳統整復推拿學分程
Credit Program in Traditional Rehabilitation and Massage

探索教育學分學程
Credit Program in Exploratory Education

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

● 開設專題導向課程、實作課程
Offering Project-Based and Practical Courses

理學院鼓勵師長藉由執行師生研究社群，引導學生探索各專業領域，激發其對深入學習相關知識的興趣與動機。後續再透過開設專題導向課程（提供學生加入教師實驗室接受指導之管道）或實作課程，提供學生於修課期間進行研究主題的探究與實作。藉此培養學生在科學期刊論文的搜尋與閱讀理解、實驗規劃與執行、數據分析與判讀、研究成果撰寫以及論文發表與口頭表達等多方面的研究能力。

The College of Science encourages faculty members to guide students in exploring various professional fields through the establishment of faculty–student research communities.

These communities inspire students 'curiosity and motivation for in-depth learning. Subsequently, through the offering of project-based courses which provide opportunities for students to join faculty laboratories for hands-on guidance and practical courses, students are able to engage in research exploration and experimentation during their coursework.

Through these initiatives, students develop a wide range of research competencies, including literature search and comprehension of scientific journal articles, experimental design and implementation, data analysis and interpretation, research writing, and academic presentation and communication.

119 門 courses

開設專題導向課程

Project-Based Courses Offered

133 門 courses

開設實作課程

Practical Courses Offered

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

● 學生參與自主學習課程或科學專案活動
Student Participation in Self-Directed Learning Courses or Scientific Project Activities

為提升學生的自主學習能力與跨領域素養，理學院積極推動科學創客自造工作坊、師生研究社群、學生學習精進工作坊、學生專題精進工作坊及各類科學專題與自主學習活動，鼓勵學生依自身興趣與志向進行探索與挑戰，培養主動學習的態度。同時，透過課程與學習資源的結合，強化專業知識，並深化對SDGs永續發展目標、5+2產業創新計畫、六大核心戰略產業、2050淨零排放路徑等重要政策的理解與實踐。114年度學生參與自主學習課程或科學專案活動共計464位。

To enhance students' self-directed learning abilities and interdisciplinary literacy, the College of Science actively promotes various initiatives such as Science Maker Workshops, Faculty-Student Research Community, learning enhancement workshops, research project advancement workshops, and diverse scientific projects and self-learning activities. Students are encouraged to explore and challenge themselves based on their own interests and aspirations, fostering a proactive learning attitude. Through the integration of courses and learning resources, the College aims to strengthen students' professional knowledge and deepen their understanding and practical application of key national policies, including the UN Sustainable Development Goals (SDGs), the 5+2 Industrial Innovation Plan, the Six Core Strategic Industries, and the 2050 Net-Zero Emission Pathway. In 2025 (Academic Year 114), a total of 464 students participated in self-directed learning courses or scientific project activities.

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

課程規劃面向　Curriculum Planning

學生參與校外實習
Student Participation in Off-Campus Internships

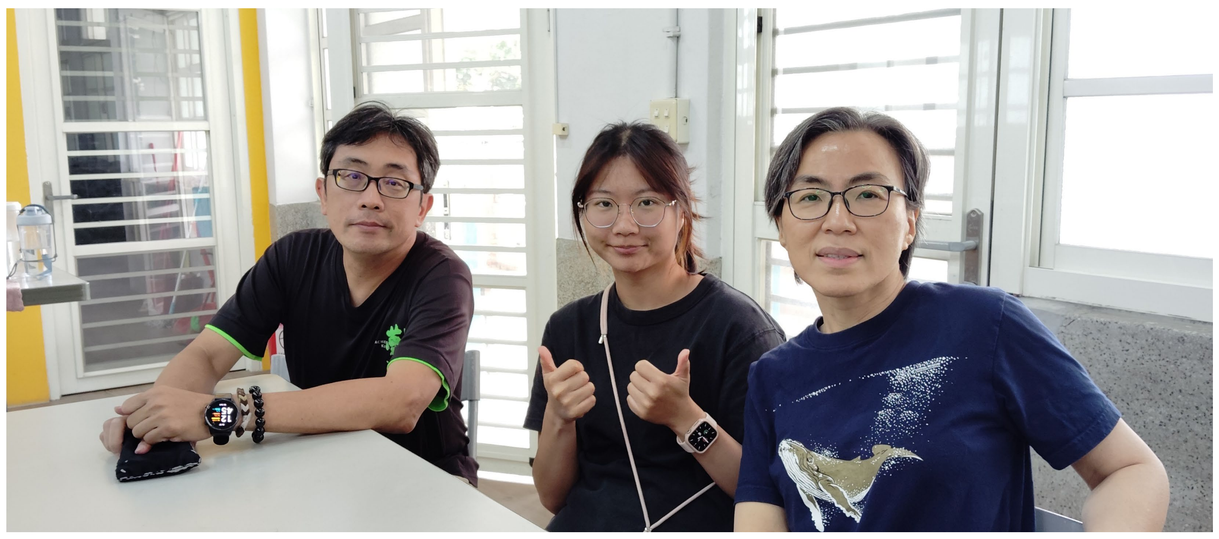
理學院積極提供學生職場體驗與實務學習機會，強化理論與實務的結合，並推動產學合作發展。鼓勵學生修習產業實習課程，參與校外實習活動，將課堂所學應用於真實職場情境中，培養專業技能與實務能力。透過與業界的密切合作，協助學生為未來職涯奠定基礎，提升就業競爭力。

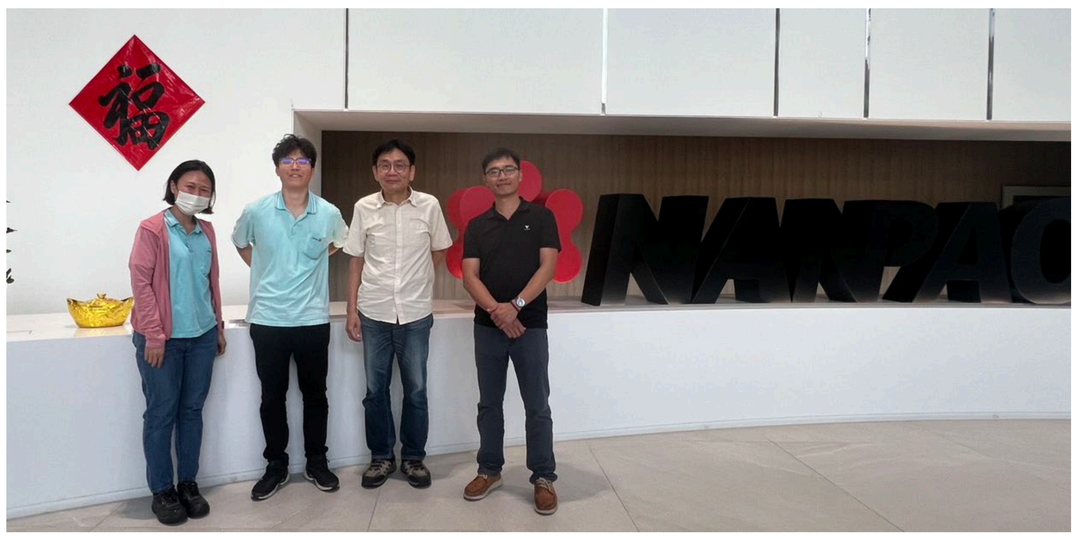
The College of Science actively provides students with opportunities for workplace experience and practical learning, strengthening the integration of theory and practice while promoting industry–academia collaboration.
Students are encouraged to take industry internship courses and participate in off-campus internship programs, applying classroom knowledge to real-world professional settings to cultivate both technical and practical competencies.
Through close cooperation with industry partners, the College helps students establish a strong foundation for their future careers and enhances their employment competitiveness.

10 人 participants

學生參與校外實習

Student participation in off-campus internships





2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

教師參與教學精進活動

Faculty participation in teaching enhancement activities

34 人次 participants

教師教學及研究能量論文發表

Faculty teaching and research output (published papers)

47 篇 papers

師生參與國際學術交流、交換進修活動

Faculty and student participation in international academic exchange and study programs

133 人次 participants

師生來臺參與學術交流、交換進行或實習活動

International faculty and students visiting Taiwan for academic exchange, study, or internship programs

76 人次 participants

學生參與學術競賽、證照考試、國內學術研討會、學術專題研究

Student participation in academic competitions, certification exams, domestic academic

132 人次 participants

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

學生支持與輔導面向　Student Support and Guidance

● 理學院課程學習精進方案。

Learning Enhancement Programs of the College of Science.

為提升學生在理學院的學習效果與專業知能，理學院辦理學生學習精進工作坊及學生專題精進工作坊，以促進其跨領域學習、提升學術表現，並強化實務應用能力。

To improve students' learning outcomes and professional competence, the College of Science organizes Student Learning Enhancement Workshops and Student Research Project Advancement Workshops. These initiatives aim to promote interdisciplinary learning, enhance academic performance, and strengthen practical application skills.

15 門 session

學生學習精進工作坊

Student Learning Enhancement Workshops

1 門 session

學生專題精進工作坊

Student Research Project Advancement Workshops

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

學生支持與輔導面向　Student Support and Guidance

● 理學院學術活動激勵方案。
Academic Activity Incentive Programs of the College of Science.

理學院致力於營造一個充滿活力的學習環境，藉由提供豐富的資源與支持，鼓勵學生積極進行自主學習並參與各類學術活動，如學術競賽、證照考試、研討會和專題研究等。以引導學生全面發展，提升其專業能力、創新思維與就業競爭力。

The College of Science is committed to creating a vibrant learning environment by providing abundant resources and support. It encourages students to actively engage in self-directed learning and participate in various academic activities, such as academic competitions, certification exams, conferences, and research projects. These efforts aim to guide students toward comprehensive development, enhancing their professional competence, innovative thinking, and career competitiveness.

41 人次 participants

學生參與證照考試

Student participation in certification exams

6 人次 participants

學生參與學術競賽

Student participation in academic competitions

67 人次 participants

學生參與國內學術研討會

Student participation in domestic academic conferences

18 人次 participants

學生參與學術專題研究
（大專學生專題研究前導型方案）

Student participation in academic research projects (Undergraduate Research Pilot Program)

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

學生支持與輔導面向　Student Support and Guidance

參與項目	學術研討會名稱	學生人數	獎項/名次
學術競賽	2025全國大專暨高中青年自然科學辯論競賽 2025 National Intercollegiate and High School Youth Science Debate Competition	4	【大專組】 金獎1面
	2025大學生創意物理實作競賽 2025 Creative Physics Implementation Competition for College Students	2	
證照考試	TOEFL iBT 托福網路測驗	1	
	IELTS雅思	1	
	多益聽力及閱讀測驗(NEW TOEIC)	35	
	以輻射防護訓練取代輻射安全操作人員 Radiation Protection Training as a Substitute for Radiation Safety Operator Certification	1	
	SOA美國精算考試 Society of Actuaries (SOA) – Probability Exam (Exam P)	1	
國內學術研討會	2025化學年會 2025 Chemistry National Meeting	16	
	2025台灣物理年會暨國家科學及技術委員會計畫成果發表會 2025 Annual Meeting of the Physical Society of Taiwan	10	
	2025年功能性材料研討會暨國科會專題研究計畫成果發表會 2025 Functional Materials Symposium and NSTC Research Project Results Presentation	2	
	2025磁性年會技術會第37屆磁學與磁性技術研討會 2025 Annual Meeting of the Taiwan Association for Magnetic Technology & 37th Symposium on Magnetism and Magnetic Technology	21	
	2025臺灣運動生物力學學會夏季研討會 2025 Summer Conference of the Taiwan Society of Biomechanics (TSB)	3	
	中國材料科學學會114年年會 114th Annual Meeting of the Materials Society	1	
學術專題研究	大專學生專題研究前導型方案 College Student Research Scholarship	18	

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

教師支持與延攬面向　Faculty Support and Recruitment

⬢理學院教師教學精進活動方案
Faculty Teaching Enhancement Programs of the College of Science

為協助教師持續精進教學專業，理學院辦理教師教學精進工作坊及教師精進EMI教學工作坊，提供教師在教學方法、課程設計、數位工具應用及雙語教學等面向的實務交流平台。透過專家分享與同儕互動，激發創新教學思維，強化教師教學效能與課堂互動品質，進而提升學生學習成效，打造更具活力與國際化的教學環境。114年度教師參與教學精進活動共計26人次。

To assist faculty members in continuously advancing their teaching professionalism, the College of Science organizes Faculty Teaching Enhancement Workshops and Faculty EMI Teaching Advancement Workshops. These programs provide a practical exchange platform for teaching methods, curriculum design, digital tool applications, and bilingual instruction. Through expert sharing and peer interaction, the College fosters innovative teaching practices, strengthens instructional effectiveness and classroom engagement, enhances student learning outcomes, and builds a more dynamic and internationalized teaching environment. In 2025 (Academic Year 114), a total of 26 faculty participations were recorded in teaching enhancement activities.

2 場 session

教師精進工作坊
Faculty Teaching Enhancement Workshop

4 場 sessions

教師精進EMI教學工作坊
Faculty EMI Teaching Advancement Workshops

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

教師支持與延攬面向　Faculty Support and Recruitment

3 件 cases

研究發展計畫
Research and Development Projects

序號 No.	計畫名稱 Project Title	系所 Department	參與師長 Participating Faculty
1	運用平衡集合理論於淨零碳排技術合作架構之研究：以資源分配與穩定性為核心分析基礎 A Study on the Cooperative Framework of Net-Zero Carbon Emission Technology Based on Equilibrium Set Theory: An Analytical Foundation for Resource Allocation and Behavioral Stability	應用數學系 Department of Applied Mathematics	廖于賢 Yu-Hsien Liao
2	屏東大學微衛星通訊基地台計畫 Pingtung University CubeSat Communication Base Project	應用物理系 Department of Applied Physics	劉宗哲 Yuan-Hsun Lo
3	綠色能源材料相關研究議題 Research Topics on Green Energy Materials	應用物理系 Department of Applied Physics	李文仁 Wen-Jen Lee

⬢ 教師教學及研究能量論文發表
Faculty Teaching and Research Output – Paper Publications

30 篇 papers

期刊論文
Journal Articles

17 篇 papers

研討會論文
Conference Papers

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

國際交流與合作面向　International Exchange and Collaboration

● 師生參與國際學術交流、交換進修活動

Faculty and Student Participation in International Academic Exchange and Study Programs

理學院鼓勵師生積極參與國際學術交流活動。教師藉由跨國學術合作與參加國際研討會，提升研究能量；學生則透過短期國際交換或實習，累積在英語授課環境下學習專業知識與實務之經驗，培養其國際視野與移動力。此外，亦引導學生將課堂所學應用於實驗室研究，以全英文撰寫論文，於國際研討會進行口頭或壁報發表，藉此提升其英語寫作與口頭報告能力，為未來學術發展或職業生涯奠定國際基礎。

The College of Science encourages both faculty and students to actively engage in international academic exchange activities. Faculty members enhance their research capacity through cross-border academic collaboration and participation in international conferences, while students gain valuable experience by joining short-term international exchange or internship programs, allowing them to study and practice professional knowledge in English-medium environments. In addition, students are guided to apply classroom learning to laboratory research, write academic papers entirely in English, and present their work in oral or poster sessions at international conferences. These experiences strengthen students' English writing and presentation skills and establish a solid international foundation for their future academic or professional development .

28 人次 participants

師生參與國際學術研討會

Faculty and student participation in international academic conferences

84 人次 participants

師生參與國際學術交流及研究活動

Faculty and student participation in international academic exchange and study programs

12 人 students

學生參與短期國際交流學習

Student participation in short-term international exchange programs

9 人 students

學生參與短期國際實習學習

Student participation in short-term international internship programs

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

國際交流與合作面向　International Exchange and Collaboration

交流項目 Exchange Program / Activity	國家地區 Country / Region	交流單位 Partner Institution / Organization	師長人數 Number of Faculty Participants	學生人數 Number of Student Participants
留職停薪 出國研究 Research Visits and Sabbatical Studies	美國 United States	加州大學河濱分校 (University of California, Riverside，UCR)	1	0
學術合作 計畫交流 Academic Collaboration and Exchange Programs	泰國 Thailand	孔敬大學 (Khon Kaen University，KKU)	9	30
	捷克 Czech Republic	馬薩里克大學 (Masaryk University，MUNI)	9	12
	日本 Japan	廣島大學 (Hiroshima University，HU)	9	12
	日本 Japan	室蘭工業大學 (Muroran Institute of Technology，Muroran IT)	2	0
短期國際 交流學習 Short-Term International Exchange Programs	韓國 South Korea	釜山外國語大學 (Busan University of Foreign Studies，BUFS)	0	6
	加拿大 Canada	維多利亞大學 (University of Victoria，UV)	0	2
	捷克 Czech Republic	赫拉德茨-克拉洛韋大學 (University of Hradec Králové，UHK)	0	4
短期國際 實習學習 Short-Term International Internship Programs	泰國 Thailand	孔敬大學 (Khon Kaen University，KKU)	0	6
	泰國 Thailand	國家科學博物館 (National Science Museum Thailand，NSM)	0	3
國際學術 研討會 International Academic Conferences	紐西蘭 New Zealand	第十一屆先進材料和奈米技術國際會議 (11th International Conference on Advanced Materials and Nanotechnology，AMN11)	0	2
	香港 Hong Kong	2025全球華人科學教育研究學會國際研討會 (International Conference on Global Chinese Academy for Science Education Research 2025，GCASER 2025)	3	0
	美國 United States	美國物理學會2025年3月及4月聯合會議 (APS Global Physics Summit 2025，APS SMT 2025)	1	0

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

國際交流與合作面向　International Exchange and Collaboration

交流項目 Exchange Program / Activity	國家地區 Country / Region	交流單位 Partner Institution / Organization	師長人數 Number of Faculty Participants	學生人數 Number of Student Participants
國際學術研討會 International Academic Conferences	日本 Japan	第五屆全球商業、行銷、社會科學與經濟學創新國際研討會 (5th International Conference on Innovation in Global Business, Marketing, Social Sciences & Economics，ICBMSS 2025)	1	0
	荷蘭 Netherlands	2025年歐洲聚合物大會 (2025 Congress of the European Polymer Federation，EPF 2025)	1	0
	法國 France	2025世界碳大會國際會議 (The World Conference on Carbon 2025，Carbon 2025)	1	0
	新加坡 Singapore	2025國際先進技術材料會議 (2025 International Conference on Materials for Advanced Technologies，ICMAT 2025)	1	0
	泰國 Thailand	2025年精密工程與永續製造國際會議 (2025 International Conference on Precision Engineering and Sustainable Manufacturing，PRESM 2025)	1	2
	日本 Japan	亞太材料研究學會2025年會 (Asia Pacific Society for Materials Research 2025 Annual Meeting，APSMR 2025)	1	3
	日本 Japan	第三十七屆形式冪級數與代數組合學國際會議 (The 37th International Conference on Formal Power Series and Algebraic Combinatorics，FPSAC 2025)	1	0
	中國 China	第三十七屆形式冪級數與代數組合學國際會議 (The 37th International Conference on Formal Power Series and Algebraic Combinatorics，FPSAC 2025)	1	0
	中國 China	第十三屆海峽兩岸圖論與組合數學會議	2	0
	英國 United Kingdom	第五十一屆國際微奈米工程研討會 (51st International Micro and Nano Engineering Conference，MNE 2025)	1	0
	日本 Japan	第十四屆材料科學與工程技術國際會議 (14th International Conference on Material Science and Engineering Technology，ICMSET 2025)	1	0
	日本 Japan	2025年第15屆應用物理與數學國際會議 (2025 15th International Conference on Applied Physics and Mathematics)	0	3
	越南 Vietnam	世界體育科技發展趨勢及越南案例 (Global Trends in Sports Science and Technology: The Case of Vietnam)	0	2

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

國際交流與合作面向　International Exchange and Collaboration

● 師生來臺參與學術交流、交換進行或實習活動
International Faculty and Student Visits to Taiwan for Academic Exchange, Study, or Internship Programs.

為強化國際連結，理學院邀請國際友校師長來臺，分別針對學術研究、跨院系教學合作、雙聯學制學位、學生研究交換及產業實習等領域展開深入討論與合作。友校師長來校期間，理學院透過帶領其參觀所屬專長領域實驗室，從中瞭解本院現有之研究設備及師長的研究能量，以吸引其推薦學生就讀本院應用科學國際碩

、博士班。外籍學生來臺後，在本院師長的帶領下，學習專業領域知識及培養儀器設備實驗操作能力，亦在學生的陪伴下體驗臺灣多元的語言及文化。

To strengthen international collaboration, the College of Science invited faculty members from partner institutions abroad to Taiwan for in-depth discussions and cooperation in various areas, including academic research, interdisciplinary teaching, dual-degree programs, student research exchange, and industry internships. During their visits, the College arranged laboratory tours aligned with each guest’ s academic expertise, allowing them to gain insight into the College’ s research facilities and faculty capabilities. This initiative also encourages visiting professors to recommend outstanding students to pursue the International Master’ s and Doctoral Programs in Applied Science at the College. Foreign students visiting Taiwan were guided by faculty advisors to develop professional knowledge and practical laboratory skills, while local student mentors accompanied them to experience Taiwan’ s diverse language and culture.

35 人次 participants

師長來臺參與學術研究交流

International faculty participating in academic research exchanges

1 人 students

學生來臺修讀雙聯學制學位

International students enrolled in dual-degree programs in Taiwan

3 人 students

學生來臺參與學術研究交換

International students participating in academic research exchanges in Taiwan

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

國際交流與合作面向　International Exchange and Collaboration

交流項目 Exchange Program / Activity	國家地區 Country / Region	交流單位 Partner Institution / Organization	師長人數 Number of Faculty Participants	學生人數 Number of Student Participants
學術研究合作交流 院際教學學生研究實習 Academic Research Collaboration and Exchange International Faculty Visit and Lecture Student Research Internship	泰國 Thailand	孔敬大學 (Khon Kaen University，KKU)	22	0
學術研究交流 Academic Research Exchange	捷克 Czech Republic	馬薩里克大學 (Masaryk University，MUNI)	11	0
	日本 Japan	廣島大學 (Hiroshima University，HU)	2	0
修讀雙聯學制學位 Dual-Degree Program Study	泰國 Thailand	塔亞布里皇家理工大學 (Rajamangala University of Technology Thanyaburi，RMUTT)	0	1
學術研究交換 Student Research Exchange	法國 France	法國洛林大學南錫國立高等礦業學校 (Nancy School of Mines, University of Lorraine，ENSMN)	0	3
實習學術交流 Academic Internship Exchange	泰國 Thailand	孔敬大學 (Khon Kaen University，KKU)	0	9
	巴基斯坦 Pakistan	國立科技大學 (National University of Sciences & Technology，NUST)	0	3
科學交流活動 Scientific Exchange Activity	泰國 Thailand	孔敬大學 (Khon Kaen University，KKU)	1	12
華語交流活動 Mandarin Language and Cultural Exchange Activity	泰國 Thailand	孔敬大學 (Khon Kaen University，KKU)	0	12

12 人 students

學生來臺參與實習學術交流

International students participating in academic internship exchanges in Taiwan

13 人次 participants

師生來臺參與科學交流活動

International faculty and students participating in scientific exchange activities in Taiwan

12 人 students

學生來臺參與華語交流活動

International students participating in Mandarin language and cultural exchange activities

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

資源分配面向 Resource Allocation Orientation

● 支持教師以團隊方式進行學術研究

Supporting Faculty Members in Conducting Cross-Department and Interdisciplinary Research

支持教師以整合型（團隊）方式進行學術研究，凝聚院與系所間的學術向心力，促進學術研究的發展與成長。114年度共計執行3件整合型計畫、10位師長參與。

To enhance interdisciplinary collaboration and strengthen the research capacity of faculty members, the College of Science has promoted cross-department and cross-disciplinary academic research. In 2025 (Academic Year 114), three integrated research projects were implemented, with participation from ten faculty members.

計畫名稱 Project Title	系所 Department	參與師長 Participating Faculty
水污染治理之新型多層面均衡與生物感測整合研究 Study on the Integrated Biological Detection of New Types of Microbial Contaminants in Water Pollution	應用數學系 Department of Applied Mathematics	廖于賢 Yu-Hsien Liao
	理學院應用科學國際碩士班 International Master Program of Applied Science of College of Science	陳皇州 Kelvin H.-C. Chen
	應用化學系 Department of Applied Chemistry	黃鐘慶 Jong-Chin Huang
錫酸鹽類鈣鈦礦之物理性質研究 Synthesis and Characterization of Thiophene-Based Organic Compounds	應用物理系 Department of Applied Physics	邱裕煌 Yu-Huang Chiu 劉岱泯 Tai-Min Liu 李建興 Jiann-Shing Lee
應用物理系磁光電研究聚落 Development of Smart Magnetic Materials for Applied Energy Research	應用物理系 Department of Physics	劉岱泯 Tai-Min Liu 許慈方 Tzu-Fang Hsu 許華書 Hua Shu Hsu
	國立臺灣大學凝態科學研究中心 Center for Condensed Matter Sciences, National Taiwan University	張玉明特聘研究員 Distinguished Research Fellow of Yu-Ming Chang
	國立中正大學物理系 Department of Physics, National Chung Cheng University	魏台輝教授 Dr. Tai-Hui Wei, Professor

2025 國立屏東大學理學院
中長程計畫暨各系特色成果展示會

資源分配面向 Resource Allocation Orientation

● 推動協同採購及共享儀器設備

Promoting Joint Procurement and Shared Use of Instruments and Equipment

配合研究發展方向，協同採購大型儀器設備，鼓勵各實驗室共享儀器設備，提高使用效率及應用價值，以達資源整合之綜效。

In line with the college’ s research and development objectives, large-scale instruments and equipment are jointly procured to support collaborative research. Laboratories are encouraged to share resources to enhance utilization efficiency and application value, thereby achieving the synergistic benefits of resource integration.

雙語環境建置 Resource Allocation Orientation

理學院為提升系所雙語環境，以應用化學系為雙語環境建置目標進行相關改造工作。由應用化學系帶領學生進行相關建置作業，於114年5月20日至5月27日辦理應化系雙語特展，專業呈現應化系之雙語環境特色及體驗性實驗活動。

To enhance the bilingual environment across its departments, the College of Science designated the Department of Applied Chemistry as the primary unit for bilingual environment development and implemented related improvement initiatives. Under the guidance of Professor Liu Lan-Yu from the Department of Science Communication, students carried out the planning and implementation tasks. A bilingual special exhibition for the Department of Applied Chemistry was held from May 20 to May 27, 2025, professionally presenting the department’ s bilingual learning environment features and its hands-on, experiential laboratory activities.