



國立高雄科技大學
National Kaohsiung University of Science and Technology

NKUST Sustainability Report 2024





Table of Contents



Foreword

About This Report	5
Message from the President	7
Key Sustainability Highlights	8
Institutional Achievements and Highlights	9



01 Sustainability Vision

1.1 About NKUST	11
1.2 Vision for Academic Development	15
1.3 Sustainability Philosophy and Action Strategies	16
1.4 Institutional Data	18
1.5 Material Topics and Stakeholder Engagement	19



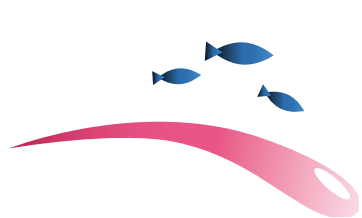
02 Institutional Governance

2.1 Diversity Governance	37
2.2 Initiatives and Partnerships	46
2.3 Workforce Diversity	49
2.4 Gender Equality	53
2.5 Grievance Mechanisms	57
2.6 Campus safety	59
2.7 Occupational Safety and Health Management	61
2.8 Information Security	65



03 Innovative Talent Development

3.1 Admissions and Financial Aid	69
3.2 Sustainability Education	75
3.3 Campus Sustainability Practices	81
3.4 Sustainable Product Development	84
3.5 Academic Performance	85
3.6 Teaching Quality Assurance	93
3.7 Academic and Ethical Integrity	96
3.8 Career Counseling and Graduate Outcomes	97



04 Social Inclusion and Engagement

4.1 University Social Responsibility	101
4.2 International Exchange	104
4.3 Resource Sharing	105
4.4 Accessible Campus	108
4.5 Historical Buildings and Open Spaces	108



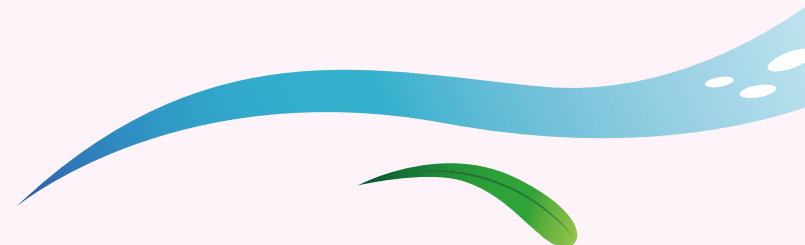
05 Green University

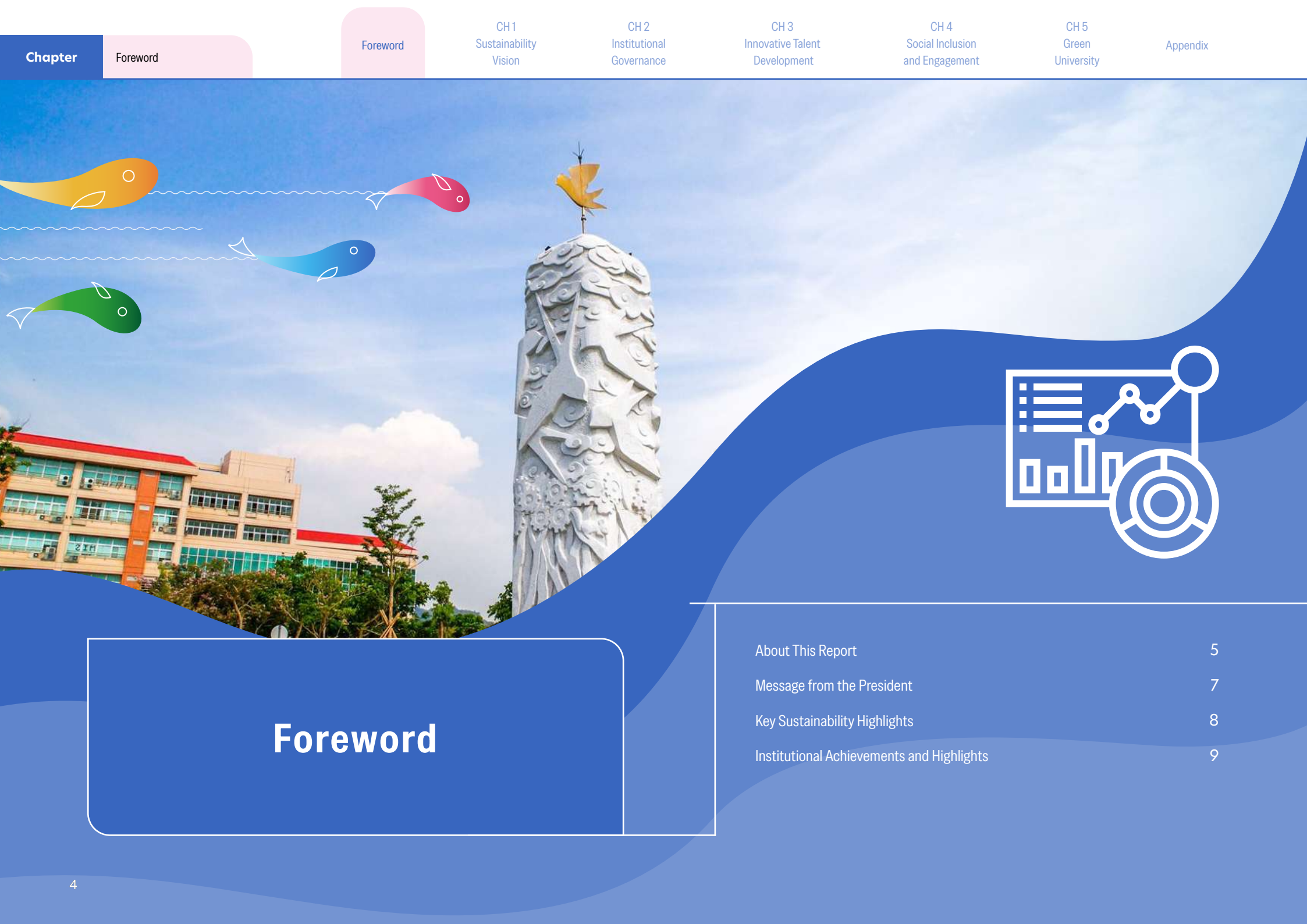
5.1 Smart Campus	111
5.2 Energy and Carbon Management	112
5.3 Air Quality and Environmental Monitoring	114
5.4 Water Resource Management	115
5.5 Waste Management	116
5.6 Green Transportation	117
5.7 Campus Ecology	119
5.8 Green Buildings	120
5.9 Green Procurement	121



Appendix

Sustainability Performance Summary Table	122
SASB: Education Index	125
SDGs & USR Project Mapping	126
STARS Content Index	128
GRI Content Index	131
Independent Assurance Statement	135





Foreword

About This Report	5
Message from the President	7
Key Sustainability Highlights	8
Institutional Achievements and Highlights	9

About This Report

National Kaohsiung University of Science and Technology (NKUST) published its 2024 Sustainability Report (hereinafter referred to as this Report) in December 2025. Through the preparation of this Report, NKUST responds to the United Nations Sustainable Development Goals (SDGs), and discloses NKUST's related performance in teaching, research, environment, social engagement and governance, providing a reference for stakeholders. This Report adopts STARS as the core framework, supplemented with reference mapping to GRI, SASB and the SDGs, and includes partial disclosures accordingly.

Compilation Principles

This report refers to the SASB's Education industry sustainability accounting indicators to define the industry context and discloses sustainability indicators based on the United Nations Sustainable Development Goals (SDGs), the Sustainability Tracking, Assessment and Rating System (STARS), and the Global Reporting Initiative (GRI) Guidelines (GRI Standards 2021). Following ESG principles, this report examines the university's sustainability performance from the perspectives of 'Environment,' 'Social,' and 'Governance.'



Reporting Period

According to the comparability principle in GRI Standard 1, organizations should use consistent criteria to select, organize, and report information, enabling them to analyze the impact of changes over time and compare these impacts with those of other organizations. Since calculations in the education industry are often based on annual and academic year periods, the disclosed data and content are primarily based on the statistical period from January 1, 2024, to December 31, 2023. For information related to teachers and students, the disclosure range is the 2023/2024 academic year (from August 1, 2023, to July 31, 2024). To ensure comprehensiveness, certain data encompasses information predating 2024 or includes the most recent information available as of 2024.

Boundaries and Scope

The information described in the report covers the National Kaohsiung University of Science and Technology (for details on each campus, please refer to page 6). The financial information disclosed in this report aligns with the scope of the performance report of the university's school fund, which has been audited by the Audit Department of the Control Yuan of the Republic of China (Taiwan). No information in the Sustainability Report has been restated. For details on various school affairs information, please visit NKUST's School Information Disclosure Website.



School Information
Disclosure

Confirmation and Verification

NKUST has appointed TUV NORD Taiwan Co., Ltd. to review the disclosed performance indicators in this report, following the AA1000 Assurance Standard (AA1000AS v3) published by the global non-profit organization AccountAbility. The review is based on the principles of inclusivity, materiality, responsiveness, and impact, encompassing the verification of relevant performance information. This process aims to bolster the quality and reliability of the report. The third-party assurance statement is available in the report's appendix.

Publication Frequency

The report was initially released in December 2021 and will be published annually moving forward. The information will be accessible to the public on the websites affiliated with the National Kaohsiung University of Science and Technology, enabling individuals from all sectors to view and download it.

Date of Issue: December 2025

Previous Date of Issue: December 2024

Feedback

National Kaohsiung University of Science and Technology Jiangong Campus

Office of Sustainable Development, Sustainable University Office

Address: No. 415, Jiangong Rd., Sanmin Dist., Kaohsiung City 807618

Contact Person: Lin Szu-Yin

Phone: 07-3814526

Email: esoffice01@nkust.edu.tw



Quality Management Process



Step 1

Committee Formation

To promote each unit's inventory of sustainability performance, upon recommendation and consent of the highest governance officer (the President), NKUST established the Sustainability Report Compilation Committee and set up six working groups: the Group of University Affairs and Governance, the Group of Scientific Research and Industry Innovation, the Group of Cross-Disciplinary Empowerment, the Group of Placemaking and Social Care, the Group of International Development and the Group of Campus Progression, to carry out related tasks. Several executive secretaries are appointed to assist in tracking the progress of report preparation and to be responsible for data consolidation.



Step 2

Impact Assessment

Questionnaires are distributed to engaged stakeholders. Based on the results, material topics are identified and ranked according to the significance of their impacts to determine the reporting priorities.



Step 3

Draft Compilation

The working group will collect and compile data, which the executive secretary will consolidate and draft to create the initial version of the Report.



Step 4

Report Review

The report was reviewed by the Sustainability Report Compilation Committee, which provided relevant revision suggestions.



Step 5

External Verification

After the revisions are completed, a third-party organization will be commissioned to conduct verification procedures and issue a third-party assurance statement.



Step 6

Finalize and Publish

After completion, the report has been finalized by the Sustainability Report Compilation Committee and is set for formal publication.

Message from the President

Statement on sustainable development strategy

The development of human civilization has progressed from a theological perspective, to a human-centered perspective, and then beyond the human-centered toward a co-prosperity perspective that examines the interdependence and mutual respect between humanity and all things in the world. In recent years, this perspective has gradually matured, and sustainability has become a shared consensus of humankind. From individuals to organizations and nations, all are examining from different angles how to change existing models to realize sustainability and how to create new systems to build sustainability. As a university, NKUST is among the few types of organizations able to address all 17 SDGs at the same time. As Socrates insightfully noted, "Education is not the filling of a vessel, but the kindling of a flame." Universities are precisely the places most suited to ignite people's passion for practicing sustainability.

From the perspective of educators, NKUST both practices sustainability by example and serves as a model, and, through education, seeks to ignite more people's creativity and ambition in pursuing sustainability. In line with the spirit of "people-oriented and co-creating value," NKUST examines and practices sustainability from multiple perspectives in campus management, in education and research, and in its humanity-centered philosophy:

I. Campus Management

NKUST has taken advantage of the opportunity presented by the merger to integrate and consolidate information systems, while vigorously developing digital tools to enhance management efficiency, reduce carbon emissions and lower expenditures. NKUST has also leveraged facility renovation and the construction of learning environments for the "future university" to introduce various information systems that increase space utilization and reduce energy waste, while investing in the installation of solar panels, water circulation systems and rainwater harvesting systems, thereby promoting sustainable circulation of resources on campus. Finally, through channels that support financial sustainability, NKUST strengthens university governance with adequate and sustainable financial resources. Although NKUST has the highest tuition reduction and waiver ratio for disadvantaged students among universities of science and technology, NKUST leverages its robust industry-academia capabilities to build up financial income, and, grounded in its philosophy of cultivating sustainability talents, has received strong donation support from alumni. Combined with appropriate financial management, NKUST is able to pave its own path toward financial sustainability.

II. Education and Research

Having taken root in Taiwan for more than 70 years, NKUST has advanced in tandem with Taiwan's industrial upgrading and transformation. Driven by energy issues and global trends, NKUST transforms its academic capacities into a sustainability engine for national industries, helping enterprises reduce costs, improve efficiency and lower carbon emissions, thereby realizing the ideals of green manufacturing and circular sustainability. Moreover, while pursuing macro-level economic competitiveness, NKUST also channels its academic strengths into local placemaking, thereby achieving regional balance and safeguarding the spirit of diverse co-prosperity that preserves local characteristics. This enables local characteristics to develop business models that can independently sustain prosperity, and allows local cultures to continue and flourish amid the torrent of human civilization.

III. Humanity-Centered Philosophy

Education is the most critical key that allows humankind to replicate, transmit and even create the assets of civilization, and is the reason why humans have been able to shape the history of the Earth over the past several millennia. NKUST attaches great importance to every future talent it cultivates, encouraging them to understand the relationship between the individual and the world and to bravely practice sustainability values within the scope of their capabilities. Within the campus environment, NKUST is tangibly committed to creating a religiously friendly and gender-friendly environment, while intangibly instilling correct concepts of gender equality and eliminating bullying, as well as promoting arts and life education to build self-reflective character and moral courage, so that every act of kindness can be woven into a net that protects human rights.

Human affairs can never achieve absolute equality and sharing, but we can plant the seeds of equality and co-prosperity in every heart, pursue equality, freedom, circularity and sustainability, strive for the harmonious coexistence of humankind and all beings, embrace the richness that diversity brings to the world, and seek to realize the value that our brief lives can contribute to the world. The sustainability spark in each person's heart is but a drop in the ocean in relation to the world, like countless stars scattered across the dark night sky. When connected, they form a flowing galaxy. NKUST's pursuit of sustainability aspires to be part of this galaxy, and NKUST relies on every one of its members to realize sustainability together.

President of the National Kaohsiung University
of Science and Technology

楊慶煜



Key Sustainability Highlights

In the QS World University Sustainability Ranking, NKUST achieved



a global ranking of
569th



137th in Asia



9th in Taiwan

The 2024 TUSA Taiwan Sustainable University Awards recognized the 'University Sustainability Report' with a **Silver Award**.



University Sustainability Report Silver Award Trophy
2024 TUSA University Sustainability Report Medal

In 2024, witnessed by the University of Applied Sciences Würzburg-Schweinfurt and the Environmental Protection Bureau of the Kaohsiung City Government, NKUST President Yang, Ching-Yu and Ambassador Chien, You-Hsin, Chairperson of the Taiwan Institute for Sustainable Energy (TAISE), signed the "University Sustainability Development Manifesto", committing to incorporating sustainable development into NKUST's medium- and long-term school affairs planning, strengthening local connections, aligning with international trends and realizing social impact. NKUST also reviewed its electricity use and carbon reduction strategies, formulated sustainability strategies and action plans, and aims to achieve carbon neutrality by 2048, thereby advancing society toward sustainable development goals.



President Yang, Ching-Yu and Ambassador Chien, You-Hsin, Chairperson of the Taiwan Institute for Sustainable Energy, jointly signing the "University Sustainability Development Manifesto."

From 2021 to 2024, NKUST received a total of



seven Gold



five Silver



four Bronze

awards in the Taiwan Sustainability Action Awards (TSAA) for four consecutive years.

2024 TSAA Taiwan Sustainability Action Awards: 2 Gold, 2 Silver, 1 Bronze

Gold



"Memory Points of Everlasting Origin"



"Good Fish Next Door Project"

Silver



"Carbon-Free Ideal - Net-Zero in Ciaotou/Nanzih"



"Coastal Sustainable Fishing Village Placemaking Action"

Bronze



"Bamboo Dream Learning - Active Leisure in Garden Fields"



2024 Sustainability Action Awards Ceremony
Recipient of the 2024 Taiwan Sustainability Action Awards

Institutional Achievements and Highlights

International Awards

- ✓ Ranked in the 401-600 band globally and 14th in Taiwan in the 2024 Times Higher Education (THE) University Impact Rankings. Ranked 86th worldwide and 2nd in Taiwan for SDG 17 "Partnerships for the Goals," and received a perfect score of 100 for the "Sustainability Report Publication" evaluation item.
- ✓ World's Top 2% Scientists 2024: 57 teachers from NKUST were listed, ranking 9th among national universities and 2nd among technological universities in 2024.

Domestic Awards

- ✓ Received the Model Award in the Industry Co-Creation Category of the 5th USR University Social Responsibility Awards in 2024.
- ✓ Ranked 14th nationwide and 3rd among technical and vocational institutions in the 2024 "Most Favored College Graduates by Enterprises" survey by Cheers Magazine.
- ✓ Ranked 2nd among public technical and vocational universities in the 2024 "CommonWealth Magazine University Social Responsibility (USR) University Citizen Survey."
- ✓ Ranked 6th nationwide, 3rd among universities of science and technology, and 2nd in southern Taiwan in the 2024 "Most Favored College Graduates by Enterprises" survey by Global Views Monthly.
- ✓ Ranked 16th nationwide and 5th among universities of science and technology in the 2024 "Best Universities in Taiwan" rankings by Global Views Monthly.
- ✓ Ranked 14th nationwide and 3rd among technical and vocational institutions in the 2024 "University Brand Power Report" survey by 104 Corporation.

Other Honors and Achievements

- ✓ Received 15 awards in the Ministry of Education's "Teaching Practice Research" Subsidies Program in academic years 2022-2023, ranking 1st nationwide.
- ✓ Ranked 7th nationwide and 1st among universities of science and technology in approved subsidy amounts under the Ministry of Education's "Higher Education Sprout Project" in 2022, and 9th nationwide and 2nd among universities of science and technology in 2023 and 2024.
- ✓ Obtained approval for 18 projects in Phases I to III of the Ministry of Education's "University Social Responsibility (USR) Practice Project," with total subsidies reaching NT\$150 million, ranking 1st among all public and private universities and colleges nationwide in both the number of projects and total subsidy amount.
- ✓ Obtained approval for 168 projects in the Ministry of Education's "Teaching Practice Research" Subsidies Program between 2022 and 2024, ranking 1st among universities of science and technology in the number of approved projects for two consecutive years.
- ✓ Ranked 1st among universities of science and technology in Taiwan and 6th among all universities and colleges nationwide in the number of approved projects in the Research Grant for University Students Approved by the National Science and Technology Council for three consecutive years from 2022 to 2024.
- ✓ Ranked 2nd nationwide in both the number of approved projects and total subsidy amount in the Ocean Affairs Council's "University and College Student Research Project on Marine Issues" in 2023 and 2024, and 1st nationwide in 2022.



Chapter 1

Sustainability Vision



1.1 About NKUST	11
1.2 Vision for Academic Development	15
1.3 Sustainability Philosophy and Action Strategies	16
1.4 Institutional Data	18
1.5 Material Topics and Stakeholder Engagement	19

1.1

About NKUST

1.1.1

History and Development of the University

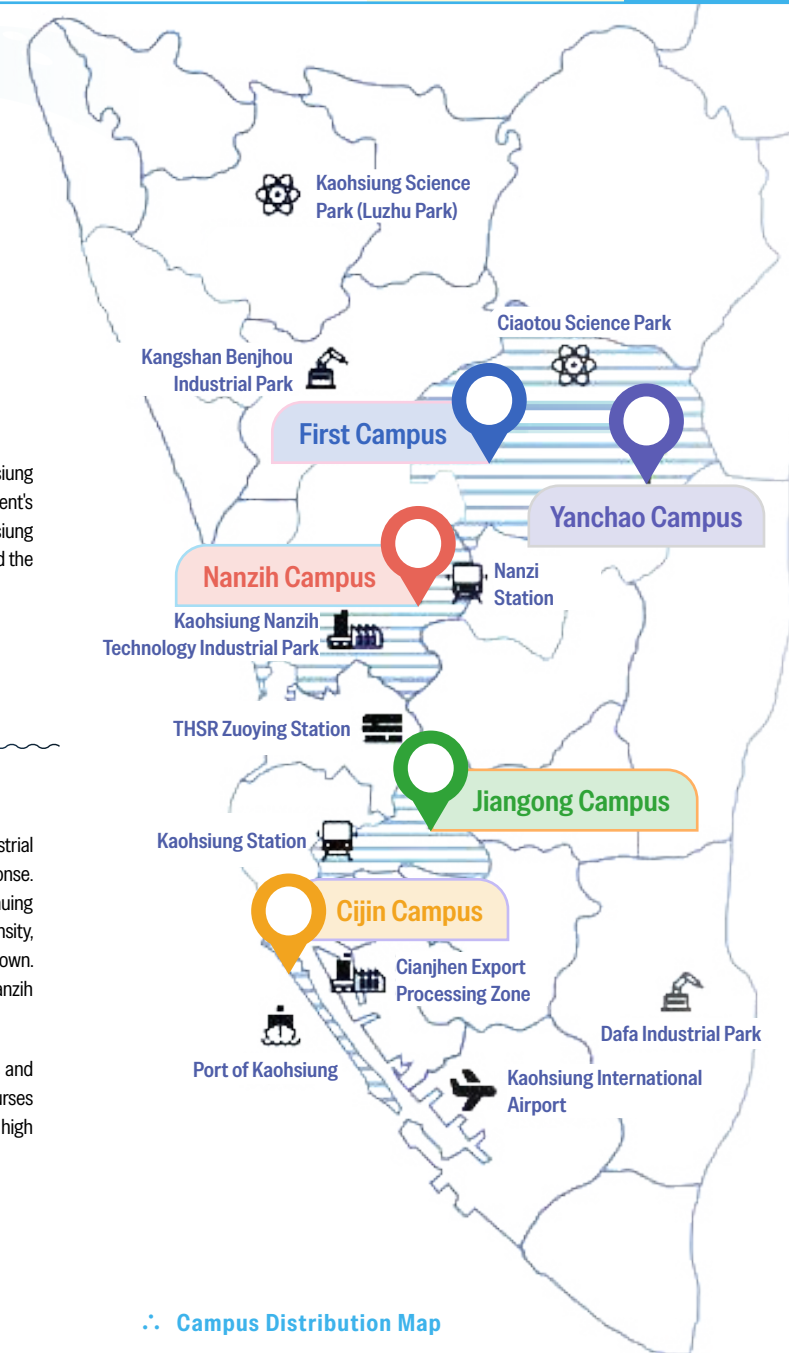
The university was established on February 1, 2018, following the merger of National Kaohsiung Marine University, National Kaohsiung University of Applied Sciences, and National Kaohsiung First University of Science and Technology. This consolidation was a response to the challenges posed by declining birth rates and global market changes, aligning with the government's policy on the consolidation of higher education institutions. Originally established in 1946 as the Provincial Keelung Marine and Fishery Senior Vocational School, the National Kaohsiung University of Marine Science and Technology is among the earliest of the three schools, with a history spanning over 75 years. With the meticulous planning of successive presidents and the concerted efforts of all faculty and students, NKUST has continued to thrive and has become a high-quality university with distinctive characteristics and an international vision.

1.1.2

Campus Scope and Services

NKUST is rooted in Kaohsiung, a harbor city in southern Taiwan. The earliest origin was in Cijin, and the three merged schools respectively mark three turning points in Taiwan's industrial development and transformation. With the popularization of education and growing industrial demand for high-level talent, various types of educational systems have emerged in response. Focusing primarily on the technological and vocational education system for cultivating industrial talent, NKUST offers programs from bachelor's, master's and doctoral levels to continuing education and extension education. Its campuses are distributed across key areas of Kaohsiung, including Cijin District near the port, Sanmin District with the highest population density, Nanzih District (two campuses) along the southern industrial S-corridor, Hunei District near the fastener industry cluster, and Yanchao District, home to Kaohsiung's largest university town. NKUST currently has five campuses, Jiangong Campus, Yanchao Campus, First Campus, Nanzih Campus and Cijin Campus, located in the administrative districts of Sanmin, Yanchao, Nanzih and Cijin in Kaohsiung City, providing students with a high-quality and diverse learning environment. The above information is included within the scope of this Sustainability Report.

Our university offers a wide range of academic programs, including day programs for five-year junior college, two-year technical college, four-year technical degrees, and master's and doctoral degrees. We also have continuing education programs for two-year and four-year technical degrees, as well as master's programs for working professionals, and various courses for lifelong learning. Our classes and teaching services are available to a large number of students, and we also welcome visits from high schools and vocational schools. A total of 2,257 high school and vocational school students have visited our campus.



∴ Campus Distribution Map

Geographical Locations and Features of the Five Campuses

Jiangong Campus



Convenient living facilities, coupled with excellent transportation, contribute to the development of continuing education and outreach programs, fostering a large pool of industry professionals. The university also offers a Senior University, actively engaging with the community, upholding its social responsibility. The departments located here belong to the following colleges: the College of Engineering, the College of Intelligent Mechanical and Electrical Engineering, the College of Electrical Engineering and Computer Science, and the College of Management.

No. 415, Jiangong Rd., Sanmin Dist.,
Kaohsiung City 807618



First Campus



Located in the southeast corner of the urban planning zone in Kaohsiung. The campus spans the Sun Yat-sen Freeway, with the academic and administrative areas in the eastern campus and the sports and recreational areas on the western campus, connected by the University Bridge for transportation. It boasts a vast area and beautiful campus scenery, hosting the College of Engineering, the College of Intelligent Mechanical and Electrical Engineering, the College of Foreign Languages, the College of Innovation and Design, the College of Electrical Engineering and Computer Science, the College of Management, and housing the Innovation and Entrepreneurship Education Center.

No. 1, Daxue Rd., Yanchao Dist., Kaohsiung
City/No. 2, Zhuoyue Rd., Nanzi Dist.,
Kaohsiung City



Yanchao Campus



The campus is traversed by the Dianbao River, a tributary of the Shenshui River. It is surrounded by mountains and water, creating a beautiful environment. The campus buildings are developed with low density, presenting a prototype of an ecological campus. It fosters humanities and hosting the College of Humanities and Social Sciences, the College of Intelligent Mechanical and Electrical Engineering, and the College of Management.

No. 58, Shenzhong Rd., Yanchao Dist.,
Kaohsiung City



Nanzih Campus



Nearby Kaohsiung Nanzih Technology Industrial Park and transport convenient Kaohsiung MRT Housing Station, hosting the College of Hydrophere Science, College of Maritime, College of Marine Commerce, College of Electrical Engineering and Computer Science, as well as a College of General Education.

No. 142, Haizhuan Rd., Nanzi Dist.,
Kaohsiung City



Cijin Campus



The campus is equipped with the country's only specialized school pier, serving as the training base for merchant ship crew members. It stands as a pivotal district for maritime education and training in the southern region, and the associated department is part of the College of Maritime.

No. 482, Zhongzhou 3rd Rd., Qijin Dist.,
Kaohsiung City



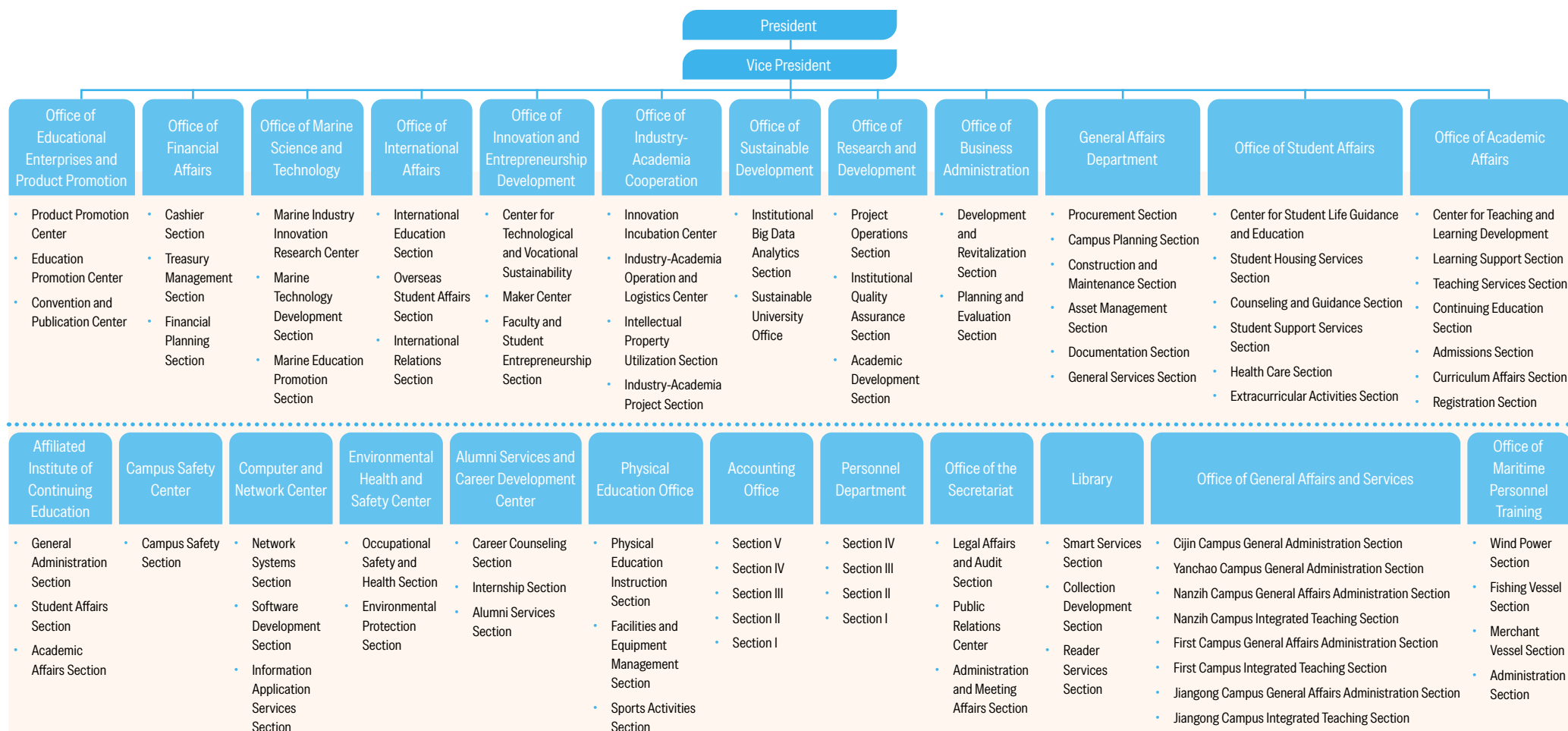
1.1.3

Organizational Structure

The administrative and academic units operate according to the 'Organizational Regulations' passed at the 4th University Council of the 2023/2024 academic year of this university on June 12, 2024. The organizational structure is described as follows:

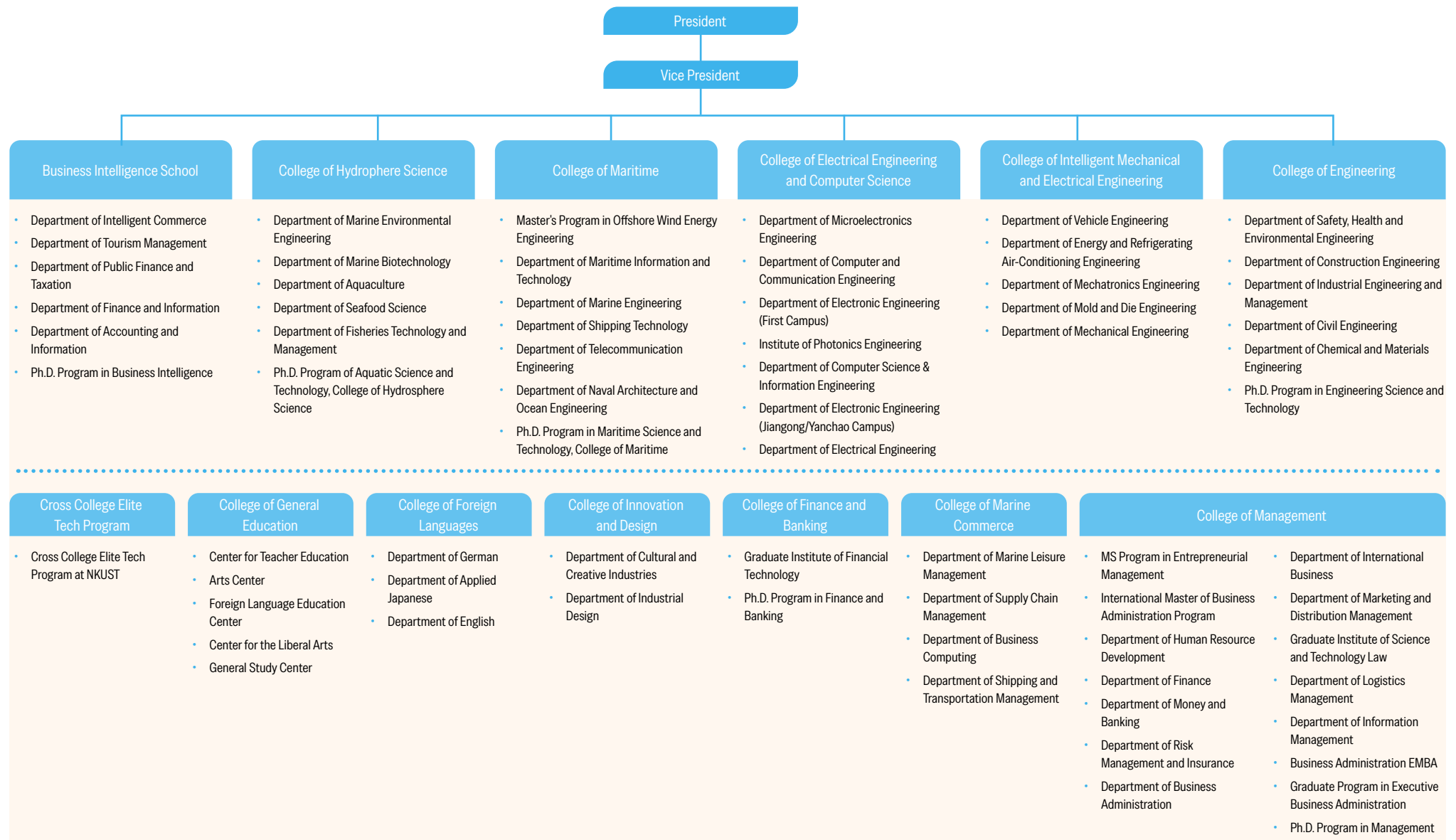
Organizational Structure of Administrative Units

Overview of Administrative Unit Organization: A total of 23 administrative units have been established, along with an Institute of Continuing Education.



Organizational Structure of Academic Units

Organization Overview of Academic Units: Comprising 12 colleges and 1 interdisciplinary degree program.



1.2

Vision for Academic Development

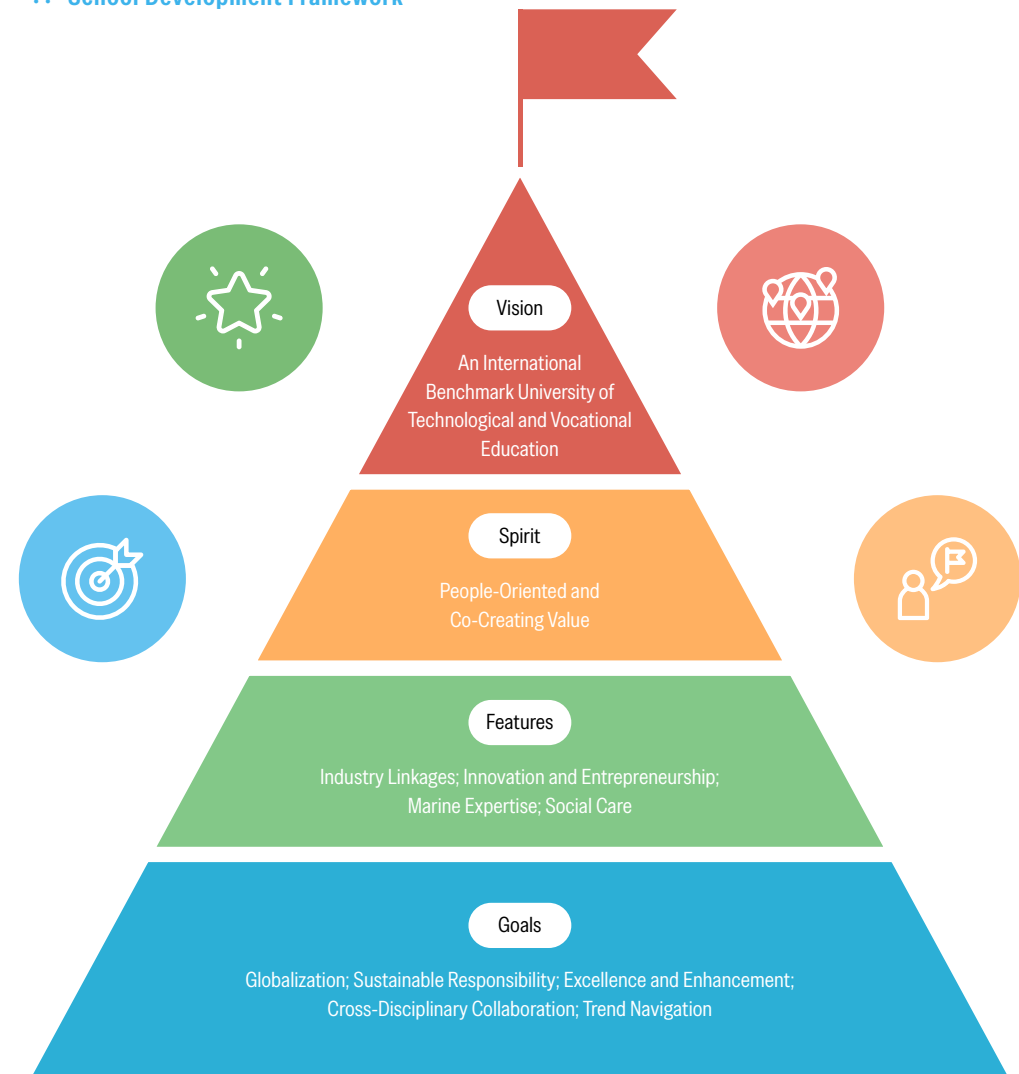
School Characteristics

Since its establishment through the merger of three schools in 2018, NKUST has overcome the challenges of cross-campus governance and has gradually completed key tasks such as campus integration and talent development. By integrating the resources and characteristics of each campus, NKUST has identified four major development features: "Industry Linkages," "Innovation and Entrepreneurship," "Marine Technology" and "Social Care." NKUST is committed to building a BEST university that leads the future and to cultivating WISH talents with a global vision and sustainability mindset, with Taiwanese students as the primary cohort while also strengthening international recruitment. NKUST provides value in education, research and social services, and its promotion of higher education includes in-service further education (extension education and industrial training). Upholding the philosophy of "people-oriented and co-creating value," NKUST positions itself as a benchmark international university of technological and vocational education. In research and innovation services, NKUST leverages industry-academia collaboration and R&D technology transfer, emphasizes aligning teaching with industry needs, promotes co-teaching by industry practitioners and practical projects, and encourages innovation, entrepreneurship and hands-on practice. NKUST deepens marine professional research and strengthens the connotation of sustainable development. In terms of social responsibility and public service, NKUST collaborates with local communities and public policy, links sustainability actions with local needs to promote social engagement, and introduces ESG and SDG concepts to fulfill its social responsibility of mutual benefit and co-prosperity. By embedding sustainability into school affairs development, NKUST demonstrates its "social care" spirit and shapes the contemporary value of technological and vocational education.

Development Vision

NKUST, with its down-to-earth campus culture, diverse academic programs, excellent teaching and research achievements, and outstanding alumni, is a university full of vitality and development potential. Looking ahead, NKUST will continue to leverage integration and synergy, strive to cultivate more outstanding technological and vocational talents, drive industrial and commercial development in southern Taiwan, and actively stimulate the growth of industry and commerce in the region. NKUST seeks to play the role of a trend navigator for sustainable development at the societal, national and global levels. Aligned with our midterm 2022-2025 school development plan, we have set our aspirations under the acronym 'GREAT', focusing on 'Globalization', 'Responsibility', 'Enhancement', 'Alignment', and 'Trend'. We integrate institutional development with national policies and global trends, underscoring our social commitment, with a focus on nurturing forward-thinking talents. Our ultimate objective is to establish an internationally renowned model university for vocational education, earning high acclaim from the global community.

∴ School Development Framework



Mission of Institutional Research and Deep Cultivation

The university is committed to promoting academic research to develop the campus ecological system and cultivate university sustainability. Based on research data, the university is implementing smart university affairs and governance and planning a comprehensive research support system. In addition to supporting the Higher Education Sprout Project strategies related to improving teaching innovation, strengthening industry-academia collaboration, enhancing the public nature of higher education and implementing social responsibility, this system also serves as the foundation driving the University's sustainable development, gradually forming a virtuous campus ecosystem.



School Information
Disclosure

The campus ecology for sustainable development is established through academic research at three levels: Firstly, by employing data-driven methodologies to construct an intelligent, value-added sustainable campus. Secondly, it will utilize academic research data to institute a digital governance mechanism, fostering the co-creation of school value. Lastly, in response to the challenges and needs schools face in sustainable development, achieve precise decision-making based on institutional data. At the same time, in response to the Ministry of Education's requirements for institutional information under the Higher Education Sprout Project, NKUST identifies and reviews research topics of key concern to stakeholders, extracts and analyzes relevant results, and discloses them on the University Affairs Information Disclosure Website for public reference, thereby demonstrating NKUST's determination to promote information transparency and sustainable development.

E-Newsletters, Publicity Materials and Publications

In response to the Ministry of Education's policy and to effectively implement the university's social responsibility initiatives, NKUST has established the University Social Responsibility Office under the Office of Academic Affairs, which publishes a [University Social Responsibility Annual Report](#) each year. In addition, the Secretariat issues a monthly [NKUST E-Newsletter](#) to promote the dissemination of sustainability learning and knowledge, and uses the [NKUST Sustainability Initiative website](#) to advance sustainability initiatives and publicize sustainability-related activities, providing online information for browsing.



School
Newsletter



NKUST's Social
Responsibility
Annual Report

1.3

Sustainability Philosophy and Action Strategies

Based on the SDGs 17 partnership, our university integrates internal and external resources to advance the practice of university social responsibility, professional ethics, and sustainability. Aligned with our development vision, we expand on the concept of FORCE, representing our sustainable values as Foresight, Organization, Responsibility, Coordination, and Expansion. NKUST continues to promote related policies, including sustainable investment, compensation and benefits, campus safety, environmental safety and health, plastic reduction, information security, New Southbound policy, sustainability concepts, renewable energy, energy conservation, local infrastructure, waste reduction and resource recycling. Related results are detailed in subsequent sections. In addition, starting from 11 November 2024, NKUST launched activities under the theme "Dual-Engine Drive, FORCE for Good in Sustainability", bringing together achievement exhibitions, forums, sustainability future technology competitions and international conferences. These diverse activities demonstrate NKUST's commitment to and practical achievements in the field of sustainable development. For details, please refer to [NKUST's news webpage](#).

∴ Sustainability Values



Foresight

Organization

Responsibility

Coordination

Expansion

∴ Sustainability Action Strategies

Foresight	• Advancing the sustainability mission from BEST to GREAT Using "BEST" as the starting point for the sustainability vision, and, by integrating the UN SDGs with the Medium-Term Plan, moving toward becoming a "GREAT University."	• Pursuing sustainable operations toward net-zero carbon emissions Establishing clear sustainable investment guidelines and a comprehensive review mechanism to ensure sustainable operations aligned with net-zero carbon emissions.	• Building a solid base for sustainability capacity Promoting cross-unit sustainability communication within the University, and strengthening partnerships externally through alliance building, policy formulation and concrete actions to lay a solid foundation for sustainability.
Organization	• Adopting smart strategies for multi-campus carbon reduction through the General Administration Division Effectively integrating resources, reducing paper use and personnel movement, lowering carbon emissions and resource waste, and enhancing administrative efficiency and team cohesion through standard operating procedures (SOPs).	• Establishing dual guardians focused on sustainable development Creating the Office of Sustainable Development and the Office of Operations and Management to concentrate on enhancing the University's sustainability capacity and to identify issues and drive continuous improvement through regular monitoring and evaluation mechanisms.	
Responsibility	• Extending care for disadvantaged groups from emergency relief to poverty alleviation Striving to protect the rights and development of disadvantaged groups on campus and, through hardware and software facilities and services, promoting cross-disciplinary industry-academia-research practices to foster diversity and inclusion.	• Transforming university capacity into social responsibility Through project implementation, long-term organizational operations, services and guidance, expanding internal resources to local communities to embed sustainability concepts deeply in society.	
Coordination	• Fostering cross-disciplinary co-prosperity under the spirit of sustainability Creating platforms and opportunities for cross-disciplinary communication among faculty and students, with a particular focus on cultivating sustainability empathy to promote collaborative management and shared prosperity.	• Leveraging technology to connect with stakeholders empathetically Designing appropriate communication channels, conducting in-depth analysis of stakeholder concerns and continuously driving institutional self-improvement and social contribution.	
Expansion	• Smart campus, new opportunities for sustainability Many on-campus systems are independently developed by faculty, combining low cost with high efficiency, and are promoted to other schools through experience sharing to jointly create new green energy campuses.	• Sharing sustainability to build a better future Widely sharing NKUST's sustainability achievements by organizing events, establishing guidance mechanisms, building digital platforms and publishing specialized books, thereby encouraging more external organizations to co-create and co-prosper.	

1.4

Institutional Data

On the University homepage, in the "[University Affairs Information Disclosure Section](#)", NKUST fully discloses various school affairs and administrative information for public access, thereby demonstrating its commitment to openness, transparency and information accessibility. Relevant data are as follows:

Campus Area  2,163,403.87 square meters	Average campus area per student  77.07 square meters.	Total floor area  619,336.06 square meters.	Average floor area per student  22.06 square meters.	Floor area of Health Care Center ¹  537.62 square meters
Number of colleges ³  12	Number of departments ⁴  49	Number of independent institutes ⁵  3	Floor area of energy-intensive facilities ²  43,339.94 square meters	
Number of school-level research centers  19	Number of college-level research centers  40	Total number of staff and faculty ⁶  3,337	Total number of students ⁷  27,419	Number of university-level sister school agreements  748
Number and Names of Foreign University Alliances There are a total of 2 alliances, including the HAWtech-TAltech Alliance and the Taiwan-Japan Alliance of Local Revitalization and Social Practice.			Number and distribution of sister universities a total of 491, including 37 in North America, 1 in Central and South America, 56 in Europe, 1 in Africa, 387 in Asia, and 9 in Oceania.	

¹Includes the Health and Hygiene Section Group, Infirmary, Health Education Guidance Office, Observation Lounge, Wellness Center, and Lactation Room.

²According to our university's statistics, high-energy-consuming equipment include the Library and Information Building at the Yanchao Campus and the Library and Information Center at the First Campus.

³Excluding the Innovation and Entrepreneurship Education Center and the interdisciplinary degree programs.

⁴Excluding independent institutes, doctoral programs, part-time students, and degree programs.

⁵For the Institute of Photonics Engineering, the Institute of Marine Affairs and Business Management, and the Graduate Institute of Science and Technology Law.

⁶Including full-time faculty, part-time faculty, regular staff, university-endowed staff, project-based employees, project researchers, and part-time assistants.

⁷Data provided by the Institutional Big Data Analytics Section, based on the 2024 Technical and Vocational Education Database.

1.5

Material Topics and Stakeholder Engagement

Since 2023, in accordance with the requirements of the GRI Standards 2021, NKUST has conducted materiality analyses of sustainability topics and, with reference to the AA1000SES stakeholder engagement standard, collected stakeholder expectations and feedback through biennial questionnaire surveys to evaluate outcomes in cultivating a campus sustainability culture. Material topics are identified based on "stakeholder level of concern" and "degree of impact on operations" and serve as the basis for preparing NKUST's Sustainability Report. With regard to the commonly used term "利害關係人" (stakeholder), the University Affairs Research Promotion Committee resolved in 2023 to adjust the Chinese translation to "互動關係人" to avoid implications of hierarchical or power relationships and to better reflect the foundation of mutual benefit. In addition, drawing on impact assessment methodologies proposed by organizations such as the Value Balancing Alliance (VBA) and Harvard Business School's "Impact-Weighted Accounts" research initiative, NKUST evaluates its positive and negative impacts on sustainable development as the basis for double materiality disclosures.

Engaged Stakeholders

Engaged stakeholders refer to internal or external groups or individuals who have an impact on the operation, teaching and research, environment, and society of our university, or who are affected by our university. Through the consultation process with the Sustainability Report Compilation Committee and the heads of primary administrative units, the relevant engaged stakeholders of our school have been identified and categorized as follows: faculty and staff, students, alumni, parents of students, government agencies, industry partners, educational partners, and the general public.

Sustainable goals agreed upon by the university and engaged stakeholders are as follows:



Faculty and Staff

Professional development; Cross-disciplinary collaboration

All university employees, including full-time faculty (professors, associate professors, assistant professors, lecturers, teaching assistants, and instructors) and full-time researchers.



Students

Professional training; Whole-person empathy

The students enrolled in various academic programs at our university include day four-year technical programs, graduate schools, master's in-service programs, doctoral programs, continuing education departments, and continuing education colleges.



Alumni

Giving back to the University and caring for others; Lifelong learning

Graduates of this university are encouraged to use the alumni email system provided by the Alumni Center for sending online questionnaires.



Parents of Students

Peace of mind in education; Enhancement of knowledge and competencies

Please assist the school staff and students in distributing the questionnaire.



Educational Partners

Resource sharing; Co-prosperity among peers

In collaboration with our partner high schools, the Office of Academic Affairs has been commissioned to distribute the questionnaire.



Industry Partners

Sustainable operations; Care for society

Business organizations collaborating with our university in industry-academia cooperation have entrusted the Office of Industry-Academia Collaboration to distribute questionnaires through their cooperative enterprises.



Government Agencies

Joint development; Prosperity for both country and society

The government project unit collaborating with our university has commissioned the Office of Research and Development to distribute an online questionnaire.



General Public

Identifying issues; Translating knowledge

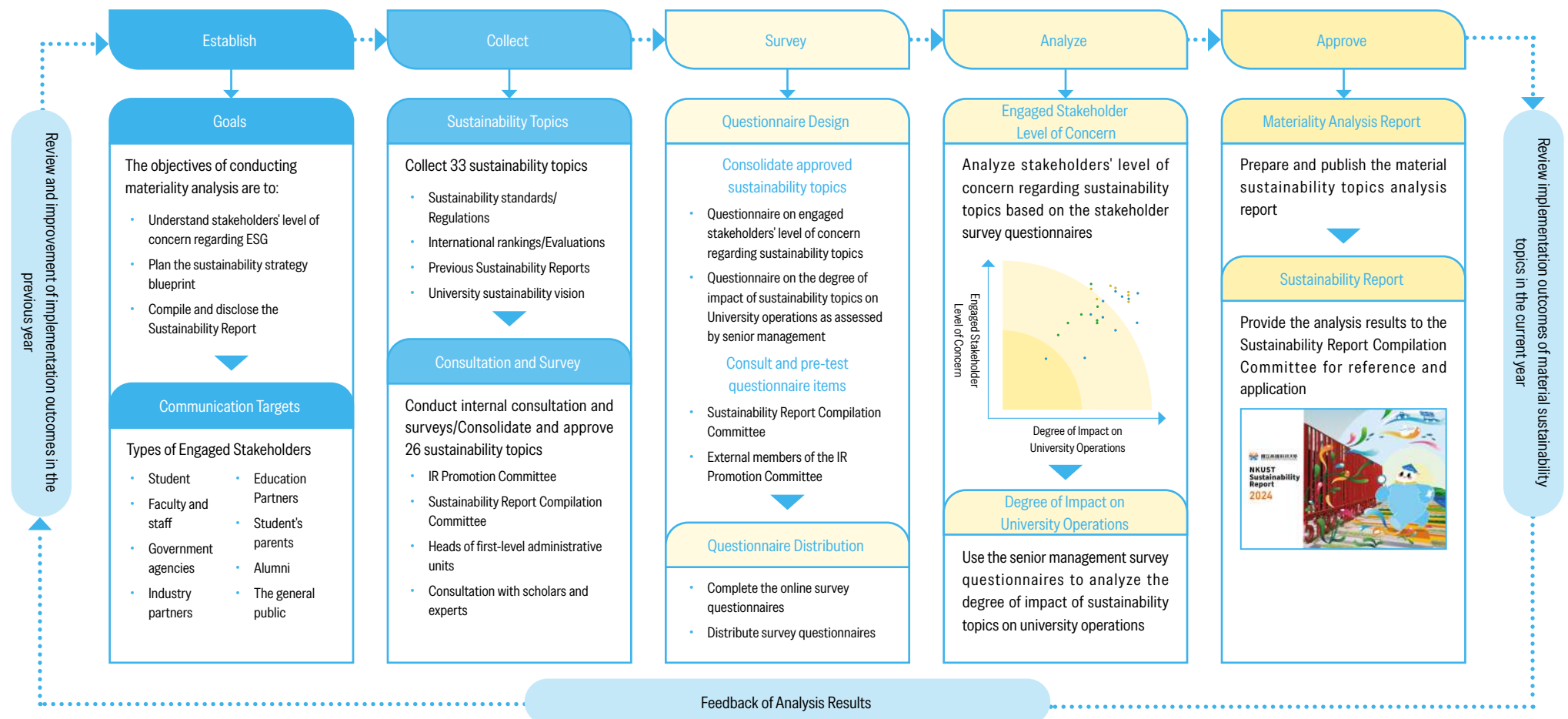
Please assist the school staff and students in distributing the questionnaire.

1.5.1

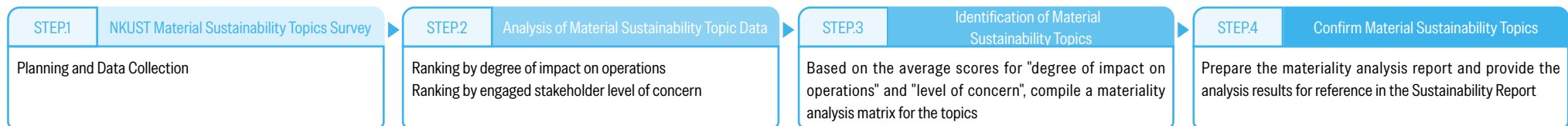
Identification of Material Topics

In order to comprehensively collect, examine, and respond to engaged stakeholders' expectations regarding sustainability issues, the university has defined a method for identifying material topics relevant to its operations, following the process outlined in GRI 3-1. Through five steps: establishment, collection, investigation, analysis, and approval, a list of 33 sustainability issues was compiled, drawing upon the institution's sustainable development vision, past sustainability reports, and domestic and international sustainability standards and regulations (such as GRI, SASB, SDGs, STARS, etc.). Through internal consultation, surveys, and verification, 26 identified sustainability issues have been selected as material topics then. Finally, through a matrix analysis involving 309 engaged stakeholders and 11 senior executives participating in questionnaire responses, 12 material topics were selected. These topics are then reported to engaged stakeholders in order of their significant impact.

∴ Identification Structure of Material Topics



∴ Identification Structure of Material Topics

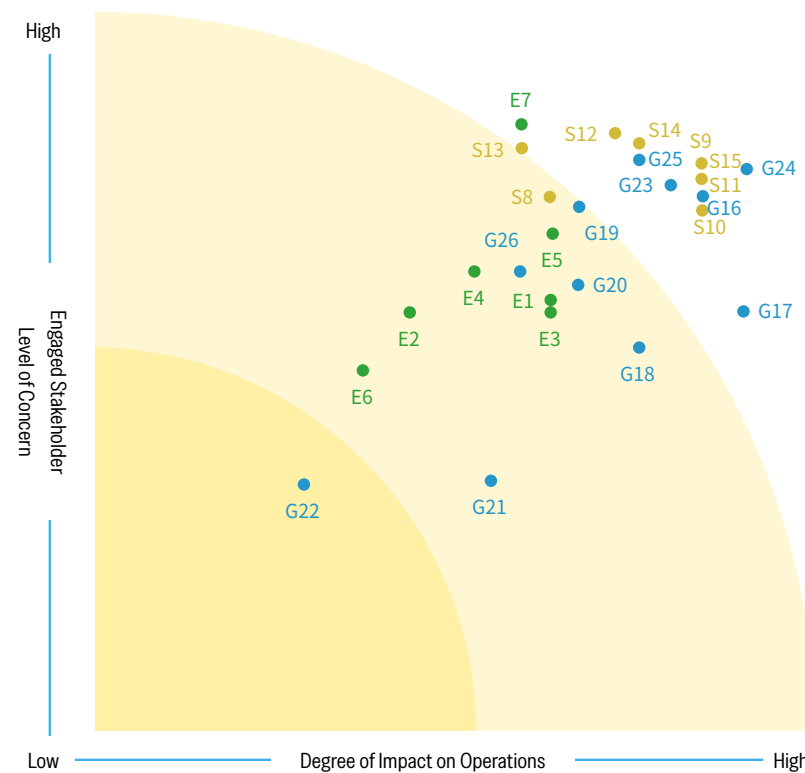


∴ Process for Material Topics

Based on the above identification process, after collecting and adopting domestic and international sustainability standards and regulations and consulting relevant scholars and experts, NKUST conducts questionnaire surveys to identify topics of common concern among stakeholders and senior management. Subsequently, the senior management decision-making team evaluates which sustainability topics have a high impact on University operations and defines these as "NKUST material topics." Based on the aforementioned principles, a total of 12 topics have been prioritized and defined as material topics. In addition, the 13 topics disclosed in the 2022 Sustainability Report were reviewed and adjusted following the recommendations of verification consultants. As the Sustainability Report is primarily used for communication with stakeholders, those topics are no longer included as material topics. Therefore, from the 2023 Sustainability Report to the present, the 12 topics shown in the figure below have been adopted as NKUST's material topics. As our university identified and analyzed material topics for the first time in 2023, with a frequency of once every two years, it is not possible to compare them with the previous reporting period. According to GRI 3-2 for identifying material topics, the results are as follows:

Environmental Protection	: including Campus Ecology and Environmental Protection.
Social Inclusion	: University Social Responsibility, International Linkages and Collaborations, Information Security, Student Assistance and Counseling, Research/Innovation and Industry-Academia Cooperation, and Sustainable Development Strategy.
Governance and Management	: University Affairs and Governance, Financial Governance and Performance, Compliance with Laws and Regulations, Academic and Ethical Integrity, and Teaching Quality Assurance and Evaluation.

∴ Matrix Chart of Material Topic Analysis Results at NKUST



Environmental Protection

- E1 Carbon Management and Net-Zero Carbon Emissions
- E2 Environmental Air Quality Monitoring
- E3 Energy Management and Diversification
- E4 Water Resource Management
- E5 Waste Management
- E6 Climate Commitment
- E7 Campus ecology and environmental protection

Social Inclusion

- S8 Social Engagement and Local Care
- S9 University Social Responsibility
- S10 International Linkages and Cooperation
- S11 Information Security
- S12 Student Academic Support and Counseling
- S13 Career Counseling and Alumni Destination
- S14 Research, innovation, and industry-academia collaboration
- S15 Sustainable development strategy

Governance and Management

- G16 Institutional Governance
- G17 Financial Governance and Performance
- G18 Personnel Recruitment and Remuneration
- G19 Gender Equality and Human Rights
- G20 Occupational Safety and Health Management
- G21 Procurement and Supply Chain Management
- G22 Product Design and Life Cycle
- G23 Compliance with Laws and Regulations
- G24 Academic and Ethical Integrity
- G25 Teaching Quality Assurance and Evaluation
- G26 Internal Control and Risk Management

Sustainable Development Impact Assessment Framework

Aspect	Sustainability Issues with Significant Impact	Impact Items	Attributes	Possibility	Severity	Remedial	Corresponding Chapter
 Environmental Aspects	Carbon Management and Net-Zero Carbon Emissions	The goal is to become a carbon-neutral university	Positive	Medium	High	-	5.2 Energy and Carbon Management
	Energy Management and Diversification	Implementation of a Smart Energy Management System to Enhance Energy Efficiency	Positive	High	Medium	-	5.2 Energy and Carbon Management
	Water Resource Management Waste Management	Wastewater and Waste Discharge Pollution	Negative	Medium	Medium	High	5.4 Water Resource Management 5.5 Waste Management
	Campus Ecology and Environmental Protection	The Cyclical Utilization and Conservation of Coexistence in the Campus Ecological Pool	Positive	High	High	-	5.7 Campus Ecology
 Human Rights Aspects	International Linkages and Cooperation	Encouraging international exchange and broaden perspectives	Positive	Medium	Low	-	4.2 International Exchange
	Sustainable Development strategy	Publish a sustainability report to showcase NKUST's sustainability achievements and performance	Positive	High	Low	-	1.3 Sustainability Philosophy and Action Strategies
	Student Awards and Counseling	Strengthening support mechanisms for disadvantaged students	Positive	Medium	Medium	-	3.1 Admissions and Financial Aid
	Social Engagement and Local Care University Social Responsibility	Assisting communities in resolving issues and fulfilling social responsibility	Positive	Medium	Medium	-	4.1 University Social Responsibility
	Information Security	Information Security Issues Leading to the Leakage of Personal Data	Negative	Medium	Medium	High	2.8 Information Security
 Economic Aspects	Institutional Governance	Transparency in Disclosing Information About Its Operations	Positive	High	Low	-	2.1 Diversity Governance
	Institutional Governance	Integrate Administrative System Functions to Enhance Service Efficiency	Positive	High	Low	-	2.1 Diversity Governance
	Compliance with laws and regulations	Non-compliance with laws and regulations regarding recruitment and compensation/benefits may lead to labor disputes	Negative	Medium	Medium	High	2.3 Workforce Diversity
	Compliance with laws and regulations	Failure to report sexual harassment and bullying incidents in accordance with regulations and negatively impact NKUST's reputation	Negative	Medium	Medium	High	2.4 Gender Equality 2.5 Grievance Mechanisms
	Compliance with laws and regulations	Failure to comply with regulations or business SOPs may adversely affect NKUST's reputation	Negative	Medium	Medium	High	2.1.2 Internal Control Mechanisms and Risk Management

Aspect	Sustainability Issues with Significant Impact	Impact Items	Attributes	Possibility	Severity	Remedial	Corresponding Chapter
 Economic Aspects	Compliance with laws and regulations	Information Security Issues Leading to the Leakage of Personal Data	Negative	Medium	Medium	High	2.8 Information Security
	Research, innovation, and Industry-academia collaboration	Failure to Apply for Research and Development Results or Technical Patents in Accordance with Regulations	Negative	Medium	High	Medium	3.5 Academic Performance
	Financial Governance and Performance	Changes in the financial environment may cause losses in the investment of the School Fund, affecting its financial position; such losses will be offset by accumulated earnings generated from prior years' investments	Negative	Low	High	Medium	2.1.3 Financial Information
	Teaching Quality Assurance and Evaluation	Promoting Innovative Teaching Methods to Address Challenges in Classroom Instruction	Positive	High	Low	-	3.6 Teaching Quality Assurance
	Academic and Ethical Integrity	Incidents of Academic Plagiarism has Occurred, Impacting the Reputation of NKUST	Negative	Medium	Medium	High	3.7 Academic and Ethical Integrity



1.5.2

Material Topics Management Policy

Policies and commitments regarding material topics mainly derive from government laws and regulations, national policies (e.g., regulations and rules issued by the Ministry of Education), and [NKUST's Medium-Term School Development Plan for 2022-2025](#). In accordance with the Medium-Term School Development Plan for 2022-2025, NKUST advances five overarching GREAT goals: "Globalization", "Responsibility", "Enhancement", "Alignment" and "Trend", and has developed 20 corresponding development strategies, which serve as the basis for NKUST's policies and commitments in school affairs.

Material Topics	Executing Unit	Policy commitments	Short-term/ Medium to Long term Goals	2024 Implementation Status
Campus Ecology and Environmental Protection	General Affairs Department Environmental Health and Safety Center	Implement campus environmental maintenance, establish a smart energy management system, and optimize campus landscape facilities to create a welcoming and friendly campus environment.	Short-term Goals - The air quality purification zone receives an assessment score of 80 or above from the Kaohsiung City Government Environmental Protection Bureau every year. - Waste generation decreased by 4.5% compared with 2021. - Resource recycling increased by 8% compared with 2021. Medium to Long term goals - One smart energy management system was established to enhance energy-saving efficiency. - In alignment with the School Development Plan, we aim to promote source reduction of campus waste. Within a four-year period (2022-2025), we plan to reduce waste generation by 5% and increase resource reclamation by 10%, using 2021 as the baseline year. - Maintain an average annual electricity savings rate of 1% or more on campus to enhance the energy efficiency of NKUST.	- An on-site inspection of the 2024 Air Quality Purification Zone was conducted by the Environmental Protection Bureau Kaohsiung City Government on August 7, 2024. The zone received a total score of 86 points, meeting the required standard. - To promote campus waste reduction, and in line with the Medium-Term School Development Plan using 2021 as the baseline, NKUST reduced waste generation by 4.66% and increased resource recycling by 101.07% (including recycling from asset disposal) by 2024, thereby achieving the set targets. - Regarding the establishment of the energy management system and maintaining the average annual energy-saving rate on campus, NKUST had, by 2024 (ROC year 113), applied for subsidies and completed tendering for installing smart meters at the First Campus. The average annual energy-saving rates at each campus were 1.04% at Jiangong Campus, 1.25% at First Campus, 1.04% at Nanzih Campus and 1.71% at Yanchao Campus, all exceeding the 1% annual energy-saving target.

Material Topics	Executing Unit	Policy commitments	Short-term/ Medium to Long term Goals	2024 Implementation Status
Student Awards and Counseling	Office of Student Affairs	NKUST is committed to enhancing the public nature of higher education, particularly for economically disadvantaged students, and implements support in accordance with the Ministry of Education's subsidy regulations and NKUST's own guidance and scholarship mechanisms for economically disadvantaged students. By planning and improving the mechanisms for education and employment assistance, we aim to ensure that disadvantaged students at our university can study and work in comfort. This will ultimately lead to their self-fulfillment, the transformation of their disadvantaged status, and the fulfillment of our social responsibility.	Short-term Goals - In response to the economic disadvantages faced by students, we have established the 'Learning in Lieu of Work-Study' program. This program allows students to focus on their studies and proactively plan their learning time. We will provide incentives to a total of 2,000 students. - Providing students with resources to develop professional skills, obtaining 100 professional certifications to enhance students' employability. Medium to Long term goals - Assisting economically disadvantaged students who participate in the academic tutoring program to improve their grades, accounting for over 70% of program participants, in order to enhance their learning performance. - Providing students with resources to develop professional skills and increasing the number of students obtaining professional certifications by 15% within 4 years to enhance graduates' employability.	- The 'Learning in Lieu of Work-Study' program has awarded a total of 3,350 students from economically disadvantaged backgrounds. - A total of 132 instances of economically disadvantaged students were supported in obtaining professional licenses.
Research, innovation, and Industry-academia Collaboration	Office of Research and Development Office of Industry-Academia Cooperation	In order to align with national industrial development policies (e.g., the National Development Council's Six Core Strategic Industries Promotion Program), we will harness the research and development capabilities of our faculty to implement practical industry-academia collaboration and applied research at our university. This will create a high-quality environment for industry-academia interaction, and we will focus on interdisciplinary education, cross-domain industry-academia cooperation, and rewarding research and development achievements.	Short-term Goals - Innovative and well-structured research incentive and subsidy measures are adopted to enhance faculty research capacity. - A total of 600 industry-academia collaboration projects have been implemented university-wide to enhance the overall research and development capabilities. Medium to Long term goals ➔ Innovative Research - Within 4 years, the number of journal articles published by the entire school has increased by 20% to enhance the quality and quantity of journal article publications at our institution. - Within 4 years, the number of subsidies for distinct types of research awards for teachers has increased by 20% to promote the academic research capacity of our university. ➔ Industry-Academia Collaboration - On average, each teacher engages in industry-academia collaboration with an annual amount exceeding 1 million, and outstanding teachers in industry-academia cooperation are rewarded to enhance the overall research and development capacity of industry and academia.	- NKUST attaches great importance to enhancing academic reputation and the quality of journal publications. Accordingly, NKUST revised its journal publication incentive regulations to stipulate that articles submitted on or after 1 August 2023 to journals published by MDPI, Frontiers Media SA, Hindawi and similar publishers are no longer eligible for incentives. According to the number of ARTICLE and REVIEW papers indexed in WOS (SCIE, SSCI, A&HCI), although the total number of papers published by NKUST in 2024 temporarily decreased to 800, the share of papers published in journals ranked within the top 10% (R ≤10%) increased significantly, representing a 44.12% increase compared with 2021. - In 2024, NKUST granted 537 incentives for journal publications, provided 38 matching subsidies for projects, subsidized 11 academic conferences, subsidized equipment for 57 NSTC projects led by newly hired faculty, and granted 96 incentives for faculty supervising students in college student research projects. Total research-related awards and subsidies reached 739, an increase of 27.41% compared with 580 in 2021. - In 2024, NKUST carried out 837 industry-academia collaboration projects, generating NT\$1,028,225,281 in industry-academia income, with an average of NT\$1,222,622 per faculty member.

Material Topics	Executing Unit	Policy commitments	Short-term/ Medium to Long term Goals	2024 Implementation Status
Teaching Quality Assurance and Evaluation	Office of Academic Affairs Office of Research and Development	The university positions itself as an exemplar of internationalized vocational education, with a focus on integrating industry connections, innovation and entrepreneurship, marine expertise, and social responsibility. It aims to cultivate talent that meets industry demands and is practical, innovative, and capable of cross-domain collaboration.	Short-term Goals 1. The teaching support system, with a focus on research-based teaching practices, has been enhanced through various innovative measures, including teacher professional development programs, grants for innovative teaching methods, problem-based and project-based learning courses, and online course development. A total of 100 grants have been awarded. Medium to Long term goals 1. The pass rate for academic units at the college or department level that apply for evaluation every year is 100%.	1. NKUST implemented various innovative measures, including teacher professional development programs, grants for innovative teaching methods, problem-based and project-based learning courses and MOOCs, with more than 100 subsidized cases in total. 2. All academic units undergoing external evaluation successfully passed, achieving a 100% pass rate.
Sustainable Development strategy	Office of Sustainable Development	In line with NKUST's Medium-Term School Development Plan for 2022-2025 and in response to the Ministry of Education's USR Practice Program and the UN SDGs, NKUST identifies "Responsibility" as a core development goal, underscoring its commitment and determination to become a sustainable university.	Short-term Goals 1. An annual sustainability report is compiled, with the key issues of the report being revised based on global sustainability trend Medium to Long term goals 1. NKUST makes effective use of university resources to promote local development and serves as a trendsetter and key driver for sustainable development in society, the nation, and globally.	1. In 2024, NKUST prepared this Sustainability Report with reference to GRI 3, SASB, STARS and the SDGs, and obtained third-party assurance. 2. Under the GREAT framework of the 2022-2025 School Development Plan, "Responsibility" is advanced through four development strategies: "Constructing an Environmentally Friendly and Sustainable University", "Promoting a Social Responsibility Support System", "Enhancing Integration and Development of Academic and Research Organizations" and "Shaping a Cultural Brand to Enhance Reputation". A total of 16 action plans and 21 key outcomes were formulated. In 2024, 20 out of 21 expected outcomes were achieved, resulting in an overall achievement rate of 98.81%.
University Social Responsibility	Office of Academic Affairs Office of Research and Development	To deepen the function of serving society at our university, we will strengthen the initiative-taking integration of colleges and universities with the community, society, and industry in order to drive the prosperity and development of the local area and fulfill our university's social responsibility.	Short-term Goals 1. Incubate 10 teams for micro projects on social responsibility. Medium to Long term goals 1. The incubated social responsibility micro-project teams have facilitated the creation of four outstanding cases.	1. From 2022 to 2024, NKUST incubated more than 10 micro project teams on social responsibility.

Material Topics	Executing Unit	Policy commitments	Short-term/ Medium to Long term Goals	2024 Implementation Status
Academic and Ethical Integrity	Office of Academic Affairs Personnel Department	In accordance with NKUST's Directions for Enhancing the Quality of Academic Theses and Dissertations, and upholding the principles of integrity, impartiality, and lawful administration, NKUST is committed to maintaining high standards of honesty and transparency in all aspects of our academic operations and decision-making processes.	Short-term Goals - Promote the participation of faculty and students in academic ethics-related courses on campus. All graduate students admitted to NKUST in the 2018/2019 academic year are required to complete a designated course at the Center for Taiwan Academic Research Ethics Education and obtain a certificate of completion before applying for their degree examinations, with a completion rate of 100%. - One anti-corruption promotion seminar is held annually. Medium to Long term goals - The pass rate for all graduate students participating in the academic ethics course on campus reached 100%. - Continuously promoting a culture of integrity, strengthening our commitment to academic ethics and clean administration, and organizing an annual lecture on promoting integrity.	- The pass rate for graduate students completing the designated academic ethics courses has reached 100%. - To strengthen faculty and staff awareness of legal compliance in the use of subsidies and commissioned project funds, NKUST held a legal education seminar on March 8, 2024, inviting Judge Yang, Chih-Shou to speak on "Legal Risks in Reimbursement of Subsidies and Commissioned Project Funds and Government Procurement", with a total of 218 participants.
Information Security	Computer and Network Center	In accordance with the "Information Security Management Directions for the Executive Yuan and its Subordinate Agencies", the "Information and Communication Security and Personal Data Management Regulations for the Education System", NKUST's Medium-Term School Development Plan for 2022-2025 and NKUST's "Privacy and Information Security Policy", NKUST promotes digitalization to ensure the stability and security of its information systems and to achieve the secondary goal of improving administrative efficiency. NKUST has formulated action plans for maintaining and expanding information equipment to ensure stable and secure information operations.	Short-term Goals - Replace network equipment type 1 to provide a stable campus network and enhance administrative service efficiency. Medium to Long term goals - Several procurement-related auxiliary equipment will be acquired to optimize the quality of teaching and administrative services in order to maintain the normal operation of the school's administrative system. - Annual maintenance of the school-wide multi-point synchronous distance video conferencing system, as well as the maintenance of administrative units and the network and computer equipment in the central classrooms. - Every year, we conduct administrative operations, teaching, and improvements to antivirus software to ensure the security and stability of all information equipment.	To enhance data transmission speed and administrative service efficiency: - Network switches in teaching buildings were replaced. - Maintenance and operation of the University-wide multi-point synchronous remote video conferencing system were completed. - Network equipment replacement rates reached 8% at Jiangong/Yanchao campuses, 20% at First Campus and 13% at Nanzih/Cijin campuses, exceeding the expected completion rates.

Material Topics	Executing Unit	Policy commitments	Short-term/ Medium to Long term Goals	2024 Implementation Status
Compliance with laws and regulations	All Units	- In line with Ministry of Education regulations and national ministry policies, NKUST formulates key points and guidelines for various operations. Through internal control mechanisms, and based on risk tolerance and materiality, high-risk operations are incorporated into control procedures to ensure regulatory compliance on campus. - To promote gender equality, prevent sexual harassment, provide a harassment-free work environment for faculty and staff and protect the privacy of parties involved, NKUST has established "Directions for Sexual Harassment Prevention, Complaints and Disciplinary Handling for Faculty and Staff" in accordance with the Act of Gender Equality in Employment, the Amendments to the Regulations for Establishing Measures on Prevention of Sexual Harassment in the Workplace, the Sexual Harassment Prevention Act and Regulations of Sexual Harassment Prevention. - The Office of Industry-Academia Collaboration is dedicated to establishing mechanisms for the planning and utilization of intellectual property on campus, including patent applications, promotion and use. Through internal review mechanisms, NKUST subsidizes inventors to protect their R&D results through domestic and foreign patents or trade secrets, thereby enhancing NKUST's R&D capacity and the quality of its intellectual property rights.	Short-term Goals - Every year, in accordance with the development of school affairs and relevant regulations, the internal regulations regarding the personnel of teachers are periodically revised. NKUST regularly reviews and updates its regulations in line with applicable laws and regulations issued by higher-level authorities. Medium to Long term goals - No major violations of laws and regulations by NKUST occurred. - By promoting diverse utilization of academic achievements and strengthening mechanisms for industry-academia collaboration and intellectual property commercialization, NKUST supports the dissemination and application of its intellectual property.	- In 2024, NKUST had no major violations of laws or regulations. - A total of 90 new or revised regulations were completed. - Spot checks and audits were conducted on 58 control operation items, and no major deficiencies were identified. - NKUST attaches great importance to gender equality and has established dedicated channels for sexual harassment complaints, including hotline, fax, dedicated mailbox and email. Dedicated personnel and units are assigned to handle sexual harassment complaints, investigations and case management. - To further refine the institutional framework governing research and development outcomes within the university, NKUST has revised the "Directions for the Handling of Revenues and Expenditures from R&D Outcomes" and the "Directions for the Disposal and Management of Technical Equity from R&D Outcomes." Additionally, through the internal patent subsidy program, NKUST encourages faculty to apply for domestic and international patents for their R&D achievements, emphasizing intellectual property rights. This initiative has resulted in the acquisition of 85 patent certificates.

Material Topics	Executing Unit	Policy commitments	Short-term/ Medium to Long term Goals	2024 Implementation Status
Institutional Governance	Office of the Secretariat Computer and Network Center Personnel Office Office of General Affairs	Based on the University's Mid-term School Development Plan for the 2022 to 2025 Academic Years and the Organizational Regulations of National Kaohsiung University of Science and Technology, NKUST takes "Enhancement" as its core, improves administrative efficiency and service capability, and promotes innovative services.	Short-term Goals - Enhance professional core competencies and improve the quality of administrative services. Each year, 50% of in-house personnel are required to complete procurement and information security training courses. Medium to Long term goals - Integrate administrative operation system functions to enhance administrative service efficiency. Increase the proportion of business informatization in each unit by 10% within 4 years.	- In March 2024, NKUST invited Judge Yang, Chih-Shou to deliver a training session on "Legal Risks in Reimbursement of Subsidies and Commissioned Project Funds and Government Procurement" for procurement-related education and training, with 218 participants, accounting for 60% of authorized staff. - In 2024, 64% of authorized staff and supervisors completed information security training courses. NKUST will continue strengthening training on information security regulations to maintain service quality. - With a medium- to long-term target of achieving a 10% digitalization ratio within four years, NKUST developed six systems in 2024, including: a student learning portfolio platform, a graduate degree examination system, a leave/return/withdrawal application system, a general education micro-credit certification system, a LINE-based midterm early warning query service for students and an in-service certificate application system. By the end of 2024, a total of 28 administrative systems had been developed, achieving a digitalization ratio of 31%. - NKUST established a University Affairs Suggestion System to collect various suggestions, encouraging administrative units to refine and improve their operations and thereby enhance administrative efficiency. In 2024, the response execution rate for suggestions reached 100%.

Material Topics	Executing Unit	Policy commitments	Short-term/ Medium to Long term Goals	2024 Implementation Status
International Linkages and Cooperation	Office of Research and Development	In line with national internationalization policies (e.g., those of the Ministry of Education's Department of International and Cross-Strait Education) and NKUST's Medium-Term School Development Plan for 2022-2025, NKUST advances "Globalization" through four key development strategies aimed at promoting international cultural and educational exchange, deepening international exchange platforms and cultivating high-level international talent.	Short-term Goals 1. Strengthening the connection with sister schools to increase opportunities for students to participate in international exchange activities, study abroad, and internships. The number of bilateral exchanges with sister schools and international partners reached 30 events. 2. NKUST aims for an annual 10% increase in co-authored papers with international academic journals to encourage departments and institutes to actively engage in cross-border research collaboration. 3. Each year, with total industry-academia income exceeding NT\$5 million, encouraging faculty to undertake international industry-academia projects and strengthening cooperation with overseas industries. 4. Each year, NKUST subsidizes departments and colleges to host two international conferences or symposia to enhance research capacity, showcase NKUST's academic performance to the global academic community and increase international visibility. 5. NKUST submits data annually for the Times Higher Education (THE) Impact Rankings and reviews the ranking results to identify gaps and implement improvements, thereby enhancing NKUST's positive impact and reputation.	1. In 2024, NKUST held 38 activities related to sister universities or international exchanges. 2. To cultivate students' international mobility and competitiveness, NKUST not only encourages students to apply for overseas exchange or short-term study programs, but also prioritizes the "SOAR English Program," which adopts immersive learning models to provide opportunities for enhancing English proficiency and cross-cultural exchanges. 3. In 2024, NKUST faculty published 448 papers in international academic journals, representing a 6% increase compared with 423 papers in 2023. 4. Faculty carried out 12 international industry-academia collaboration projects, generating a total of NT\$5,282,868 in industry-academia income. 5. A total of 11 international conferences received approved subsidies. 6. In the 2024 Times Higher Education (THE) University Impact Rankings, NKUST ranked in the 401-600 band, improving by 200 places compared with 2023. 7. By 2024, the number of students participating in international exchanges in departmental laboratories/research groups reached 22, representing a 22% increase. 8. By 2024, student international learning participation reached 627 instances, a 1,744% increase compared with 34 instances in 2021. 9. By 2024, NKUST had participated in and operated three international alliance cooperative projects, including two bilateral seed faculty cooperation projects under the HAWtech-TAltech and participation in the Taiwan-Japan Alliance of Local Revitalization and Social Practice, through which NKUST promoted the "Taiwan-Japan Alliance: USR International Cooperation Project." 10. By 2024, NKUST had subsidized and offered a total of 16 international co-taught courses.
	Office of International Affairs Office of Industry-Academia Collaboration Alumni Center and Office of Sustainable Development		Medium to Long term goals 1. Within four years, NKUST aims to increase by 30% (compared with 2021) the number of students participating in international laboratory exchanges, thereby strengthening exchanges between NKUST and overseas laboratories and research groups. 2. Within four years, NKUST aims to increase by 30% (compared with 2021) the number of students participating in overseas study, internships and exchanges, providing more opportunities for students to broaden their horizons and develop a global outlook. 3. Within four years, NKUST plans to participate in and operate at least three international alliance cooperative projects to build a closely connected international network and enhance its international reputation. 4. Within four years, NKUST aims to assist departments and colleges in jointly offering 16 cross-border co-taught courses with overseas universities, increasing by four additional courses each year.	

Material Topics	Executing Unit	Policy commitments	Short-term/ Medium to Long term Goals	2024 Implementation Status
Financial Governance and Performance	Office of Financial Affairs Accounting Office	To ensure the sustainable operation of the School Fund and enhance its investment efficiency, NKUST, in accordance with the "National University Endowment Fund Establishment Act," the "Regulations Regarding the Management and Supervision of School Funds at National Universities/ Colleges" and NKUST's Directions for the Management of Investment Revenues and Expenditures, prepares an annual "School Fund Investment Plan." The plan is submitted to the Investment Management Team and the School Fund Management Committee for review and is incorporated into the School Fund Financial Planning Report, which is approved by the University Affairs Meeting and then submitted to the Ministry of Education for record.	Short-term Goals - To achieve a stable academic fund and expand the goals of academic development, it is ensured that there is no substantial deficit in the annual financial statements. Medium to Long term goals - Implement annual financial planning reports for school funds and a mechanism for disclosing school financial information.	- NKUST updates the School Fund Financial Planning Report annually and discloses School Fund financial information on its website. - NKUST's final accounts showed a deficit of NT\$146,386 thousand. However, in accordance with Article 21, Paragraph 2 of the "Regulations Regarding the Management and Supervision of School Funds at National Universities/ Colleges", and after adding back NT\$564,882 thousand in depreciation, depletion and amortization expenses for assets acquired through government appropriations in line with generally accepted accounting principles, NKUST recorded an actual surplus of NT\$418,496 thousand.

1.5.3

Listening to Engaged Stakeholders

The school is committed to engaging with all engaged stakeholders and strives to understand the various issues that different organizations and individuals care about. Through NKUST's School Information Disclosure Website and sustainability platform, we communicate our policy commitments, and by establishing effective communication channels, the school aims to facilitate two-way communication and feedback, thereby promoting the development of the school and creating a diverse and friendly campus environment. The following is an explanation of the issues, communication methods, and frequency of concern to engaged stakeholders:

Scope	The Significance of NKUST	Concerned issues	Communication Method	Frequency
 Faculty and staff	The faculty and staff are the most valuable assets of our institution, and we strive to create an excellent working environment through a comprehensive compensation and benefits system.	Energy Management and Diversification	Campus Feedback System	At any time
		Campus Ecology and Environmental Protection *	Satisfaction Survey for Administrative Services	Once a year
		Information Security *	University Council	Two sessions per semester
		Career Counseling and Alumni Destination	Administrative Meeting	Once per month
		Research, innovation, and Industry-academia Collaboration	Internal Relevant Committees	Handle according to demand
		Sustainable Development strategy	University-level Research Center Exchange Symposium	Ad hoc
		Institutional Governance	Administrative and Academic Exchange Symposium	Once every semester
		Financial Governance and Performance	Public Hearings	Ad hoc
		Personnel Recruitment and Remuneration *	Academic Affairs Exchange Meeting	Once every academic year
		Occupational Health and Safety Management	Handling of Staff Grievances	Case Review
		Compliance with laws and regulations	Labor-Management Meeting	Once every 3 months
			School Website and Campus Information Public Section	At any time
			Official Email Addresses for Every Department	At any time
 Student	Students are the driving force behind our school's continuous promotion of innovative education, with the expectation of cultivating more outstanding technical and vocational talents to drive the development of businesses in the southern region.	Campus Ecology and Environmental Protection *	Campus Feedback System	At any time
		Information Security *	Satisfaction Survey for Administrative Services	Once a year
		Student Awards and Counseling	Intern Student Satisfaction Survey	Once every academic year
		Career Counseling and Alumni Destination	University Council	Two sessions per semester
			Students with Disabilities	Handle according to demand
			Individual Support Plan (ISP) Meeting	

Scope	The Significance of NKUST	Concerned issues	Communication Method	Frequency
 Student	Students are the driving force behind our school's continuous promotion of innovative education, with the expectation of cultivating more outstanding technical and vocational talents to drive the development of businesses in the southern region.	Research, innovation, and Industry-academia Collaboration * Gender Equality and Human Rights * Compliance with laws and regulations Teaching Quality Assurance and Evaluation	Meeting with the Principal	Once every semester
			Internal Relevant Committees	Handle according to demand
			Dormitory Student Conference	Once every semester
			Handling Student Grievances	Case Review
			School Website and Campus Information Public Section	At any time
			Official Email Addresses for Every Department	At any time
 Alumni	Alumni are important drivers in promoting our university's expansion into a wider range of higher education fields. Through the cohesion of the alumni association, we provide employment and innovation services, showcasing the reputation and vision of our alma mater.	Campus Ecology and Environmental Protection * Community Engagement and Local Care University Social Responsibility Information Security Student Awards and Counseling * Career Counseling and Alumni Destination Research, innovation, and Industry-academia Collaboration Sustainable Development strategy Institutional Governance Financial Governance and Performance Compliance with laws and regulations *	Campus Feedback System	At any time
			Employer Satisfaction Survey	Once every academic year
			Graduate Destination Survey	Once every academic year
			Alumni Services System	At any time
			NKUST Alumni Center Website	At any time
			Internship and Employment Expert Website and Social Media	At any time
			Conducting selection for outstanding alumni and outstanding departmental alumni	Once a year
			School Anniversary Ceremony and Series of Events	At least 15 events per year
			School Website and Campus Information Public Section	At any time
			Official Email Addresses for Every Department	At any time
 Student's parents	Parents play a crucial role in driving the educational process, as they actively participate in and contribute to their children's education. Through effective communication and feedback, parents gain a deeper understanding of the direction and purpose of educational reforms, and work hand in hand to strive for their children's educational success.	Campus Ecology and Environmental Protection; Student Grants and Counseling * Career Counseling and Alumni Destination * Research, innovation, and Industry-academia Collaboration * Teaching Quality Assurance and Evaluation *	Campus Feedback System	At any time
			Students with Disabilities	Handle according to demand
			Individual Support Plan (ISP) Meeting	Handle according to demand
			Admissions Information Seminar	Handle according to demand
			Prospective Students' Parents Briefing Session	At any time

Scope	The Significance of NKUST	Concerned issues	Communication Method	Frequency
 Education Partners	Education partners play a crucial role as a bridge between students and our institution, fostering a close connection through various activities and lectures.	Campus Ecology and Environmental Protection *	Campus Feedback System	At any time
		Information Security		
		Student Awards and Counseling *	High School Students Orientation and Mock Test	Approximately 30 events per year
		Sustainable Development strategy		
		Institutional Governance	School Website and Campus Information Public Section	At any time
 Industry partners	Enterprise partners play a crucial role in innovative research and student internships at our university. By matching industries together, we are committed to realizing innovation and entrepreneurship, cultivating innovative talents with cross-disciplinary integration capabilities.	Financial Governance and Performance		
		Gender Equality and Human Rights *		
		Compliance with laws and regulations	Official Email Addresses for Every Department	At any time
		Teaching Quality Assurance and Evaluation		
			Campus Feedback System	At any time
			Internship Institution Satisfaction Survey	Once every academic year
			Employer Satisfaction Survey	Once every academic year
		Campus Ecology and Environmental Protection*		
		Information Security	Internship and Employment Expert Website and Social Media	At any time
		Student Awards and Counseling *	Meetings and workshops related to various project plans	Handle according to demand
		Career Counseling and Alumni Destination	The public website for each project plan	At any time
		Research, innovation, and Industry-academia Collaboration	Contact and negotiate with enterprises for industry-academia collaboration projects	Handle according to demand
		Sustainable Development strategy	Industry-Academia Collaboration Seminar, Industry-Academia Exchange Meeting, Corporate Presentation	Handle according to demand
		Institutional Governance	Technology Transfer and Licensed Manufacturers	Ad hoc
		Financial Governance and Performance	Industry-Academia Collaboration Platform	At any time
		Gender Equality and Human Rights *	Landlord Symposium	Once every year
		Procurement and Supply Chain Management	Distribution of press releases and organization of press conferences	Ad hoc
			Development of self-media	Ad hoc
			Business Attraction Evaluation Conference	At least 3 per year
			Procurement Evaluation Meeting	At least 3 per year

Scope	The Significance of NKUST	Concerned issues	Communication Method	Frequency
 Industry partners	Enterprise partners play a crucial role in innovative research and student internships at our university. By matching industries together, we are committed to realizing innovation and entrepreneurship, cultivating innovative talents with cross-disciplinary integration capabilities.	Product Design and Lifecycle Management Compliance with laws and regulations Teaching Quality Assurance and Evaluation	Outsourced Manufacturer Employee Interview Meeting	Once every year
			Manufacturer Education and Training	Once a year
			School Website and Campus Information Public Section	At any time
			Official Email Addresses for Every Department	At any time
 Government agencies	In the progress of school affairs, the government not only plays a crucial role as a leader and advisor but also collaborates with the industry to cultivate talents with innovative capabilities and liberal arts education.	Campus Ecology and Environmental Protection * University Social Responsibility * Information Security Career Counseling and Alumni Destination * Sustainable Development strategy * Institutional Governance Financial Governance and Performance Occupational Health and Safety Management Procurement and Supply Chain Management Teaching Quality Assurance and Evaluation * Compliance with laws and regulations	Kaohsiung City University Consortium meeting	Handle according to demand
			Meetings of Various Administrators in National Universities and Colleges	More than 4 events per year
			Campus Database Reporting	Once every 2 years
			Official documents and on-the-spot inspections	Approximately 800 items per month
			Meetings and workshops related to various project plans	Handle according to demand
			The public website for each project plan	At any time
			Accreditation by various professional organizations, self-evaluation by academic units	Handle according to demand
			School Website and Campus Information Public Section	At any time
 The general public	Utilizing the social influence of universities, integrating resources on campus, and collaborating with industries, we are committed to engaging in ecological issues and elderly affairs in the surrounding communities, in order to build a mutually beneficial and prosperous society.	Water Resource Management Waste management Campus Ecology and Environmental Protection * Community Engagement and Local Care University Social Responsibility Research, innovation, and Industry-academia Collaboration * Sustainable Development strategy Compliance with laws and regulations Academic and Ethical Integrity *	Campus Feedback System	At any time
			Continuing Education Conference	Handle according to demand
			Volunteer Service and Social Practice (Pay attention to exchanges and visits)	At least 6 per year
			School Website and Campus Information Public Section	At any time
			Official Email Addresses for Every Department	At any time

* ** Indicates that after identifying material topics, it represents the most concerning issue for engaged stakeholders within that category.



Chapter 2

Institutional Governance

2.1 Diversity Governance	37
2.2 Initiatives and Partnerships	46
2.3 Workforce Diversity	49
2.4 Gender Equality	53
2.5 Grievance Mechanisms	57
2.6 Campus safety	59
2.7 Occupational Safety and Health Management	61
2.8 Information Security	65

2.1

Diversity Governance

2.1.1

Decision-Making Meetings and Organizations

NKUST has established the 'Organization Regulations of National Kaohsiung University of Science and Technology' in accordance with Article 36 of the 'University Act,' aiming to conduct academic research, teach applied technology, cultivate advanced professional talent, enhance culture, serve society, and promote the development of national industries. According to Article 3 of the Organizational Regulations of our school, there shall be one president responsible for overall school affairs, who is responsible for institutional development and represents the University externally, and two to six vice presidents to assist the president in handling school affairs. Each administrative unit shall establish comprehensive business standard operating procedures under relevant laws and regulations and shall be responsible for implementing various academic decisions based on delegated authority at each level.

To effectively advance University affairs, Article 35 of the Organizational Regulations stipulates that the University Affairs Meeting is the highest governance body and the unit responsible for ESG-related decision-making and oversight. The meeting is convened twice each semester and chaired by the President. Members include Vice Presidents (six in total, including one woman), heads of first-level administrative units with management authority, deans of colleges, the Director of University Affairs for the Continuing Education College, as well as representatives of faculty, staff and students, and other relevant personnel. The President serves a four-year term and may be reappointed only once. A new President will be selected in 2025 in accordance with the Regulations for the Selection of the President of National Kaohsiung University of Science and Technology. Faculty and staff representatives are elected by secret ballot. Student representatives include the President of the Student Association and the Speaker of the Student Congress as ex officio members. Any remaining student representative seats are filled by elections conducted in accordance with procedures established by the Student Association. In addition, the Kaohsiung National Kaohsiung University of Science and Technology Faculty Association appoints one representative. Furthermore, in accordance with Article 35 of the Organizational Regulations, each operational unit convenes various meetings based on its responsibilities to facilitate business implementation. Article 36 further stipulates that, for University-wide major issues or matters affecting the rights and interests of members, NKUST shall establish a Gender Equality Education Committee and various grievance or review committees to protect the rights of faculty, staff and students. NKUST also conducts regular reviews and audits through its internal control system to ensure compliance with laws and regulations. Each committee includes representatives of faculty, staff and students as appropriate to its nature, ensuring that the rights of campus members are protected and that diverse interests and needs can be expressed within the committees, thus achieving checks and balances. If the chairperson or any attendee is aware of a potential conflict of interest, they must voluntarily recuse themselves in accordance with the "Act on Recusal of Public Servants Due to Conflicts of Interest." Public servants (and their related parties) must recuse themselves whenever their actions or inaction in performing official duties may benefit themselves or their related parties, thereby ensuring balanced decision-making and sound university governance.

∴ Agendas and Deliberations of Various Meetings

University Council

- School development plan and budget.
- Organizational regulations and various important provisions.
- The establishment, modification, and termination of colleges, departments, institutes, degree programs, centers, departments, halls, offices, divisions, other units, and affiliated institutions.
- Academic Affairs, Student Affairs, General Affairs, Research, and other important matters within the school.
- Regarding the deliberation on the teaching evaluation measures.
- Resolutions of committees or project groups established through the University Council.
- Meeting proposals and the president's suggestions.

Administrative Meeting

- Discussion of important administrative matters and regulations of our university.

Meeting of administrative units including
Teaching Research and General Administration

- The important matters and relevant regulations discussed and deliberated by various units include the Academic Affairs Meeting, Student Affairs Meeting, General Affairs Meeting, Research and Development Meeting, Ocean Technology Development Meeting, Joint Education Meeting, and Innovation and Entrepreneurship Education Meeting.

College Affairs Meeting

- Discuss issues related to teaching, research, counseling, services, and other administrative matters within the college.

Department (Division, Office) Affairs, Education Center,
Degree Program Meeting

- Discuss issues relating to various departments (division, office) affairs, centers, graduate school, degree programs, research, counseling, servicing and other matters.

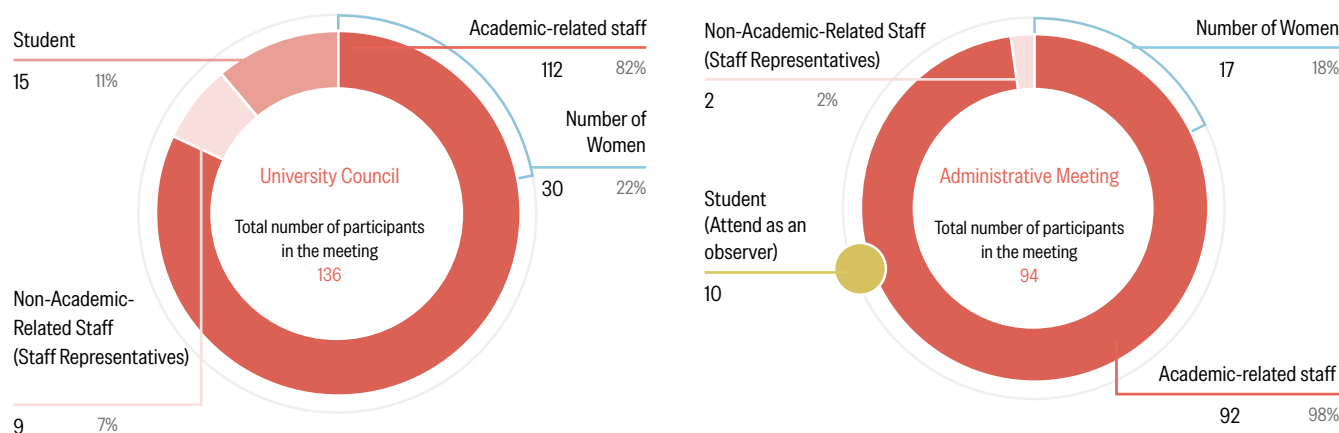
Department, Building, Center, and Office Affairs Meeting

- Discuss matters related to each respective unit.

Various Committees

- The committee oversees specific matters, and any conflict of interest are also reviewed and addressed by various committees, including the Teacher Evaluation Committee, Teacher Grievance Review Committee, Students Appeal Review Committee, school fund Management Committee, Gender Equality Education Committee, Campus Planning Committee, Campus Development Committee, Curriculum Committee, Legal Committee, and Special Education Promotion Committee. Additional committees may be established as necessary.

∴ Composition of Participants in the Important Decision-making Meeting for the Academic Year 2023/2024



∴ Agenda and Composition of Faculty and Staff-related Meetings

Name	Deliberation Items	Composition of Members				
		Number / Ratio	Total	Academic-related staff	Non-Academic-Related Staff (Staff Representatives)	Number of Women
Faculty Evaluation Committee	Deliberation involves the appointment, term, promotion, suspension, termination, non-renewal, and justification for dismissal of faculty at this university. It encompasses handling breaches of faculty obligations and assessments of teaching qualifications, as well as decisions on rewards, penalties, further education, academic research, faculty evaluation, tenure extension, appointment, and promotion of research personnel. These discussions lead to the final resolution of cases, complying with applicable laws and regulations.	People	39	39	0	13
		Ratio	100%	100%	0%	33%
Human Resources Review Committee for the Employment of Staff funded by the school fund.	Allocation of university-endowed staff, manpower planning, categorization, salary determination, and other related matters, including ad hoc reviews concerning school fund personnel.	People	11	11	0	5
		Ratio	100%	100%	0%	45%
Labor-Management Meeting	Matters regarding the working hours and employee rights of laborers shall be subject to mutual agreement between labor and management.	People	18	8	10	9
		Ratio	100%	44%	55%	50%

Executive Roundtable Meeting

To foster campus integration and exchange, discuss University affairs and development strategies and jointly deliberate on sustainability issues, NKUST has held an annual roundtable meeting each year since 2020. On February 16-17, 2024, NKUST held a consensus camp and roundtable meeting for administrative and academic leaders under the theme "Advancing Separately yet Acting in Concert for Sustainable Development". Participants included the President, Vice Presidents, heads of first-level administrative and academic units, associate deans, deputy administrative heads and faculty representatives of the University Affairs Meeting. The meeting reflected on NKUST's current competitiveness, explored ways to transform weaknesses into strengths, and gathered diverse faculty perspectives, with the aim of fostering self-reflection, building consensus, shaping shared values and strengthening the internal team culture. Discussion topics included: Deepening research-industry linkages; facilities development for foundational or specialized fields in academic and administrative units; collaboration-driven innovation and emotional resilience; and trends in general education development. The outcomes of the meeting have been compiled into a handbook and uploaded to the Secretariat webpage for public reference.

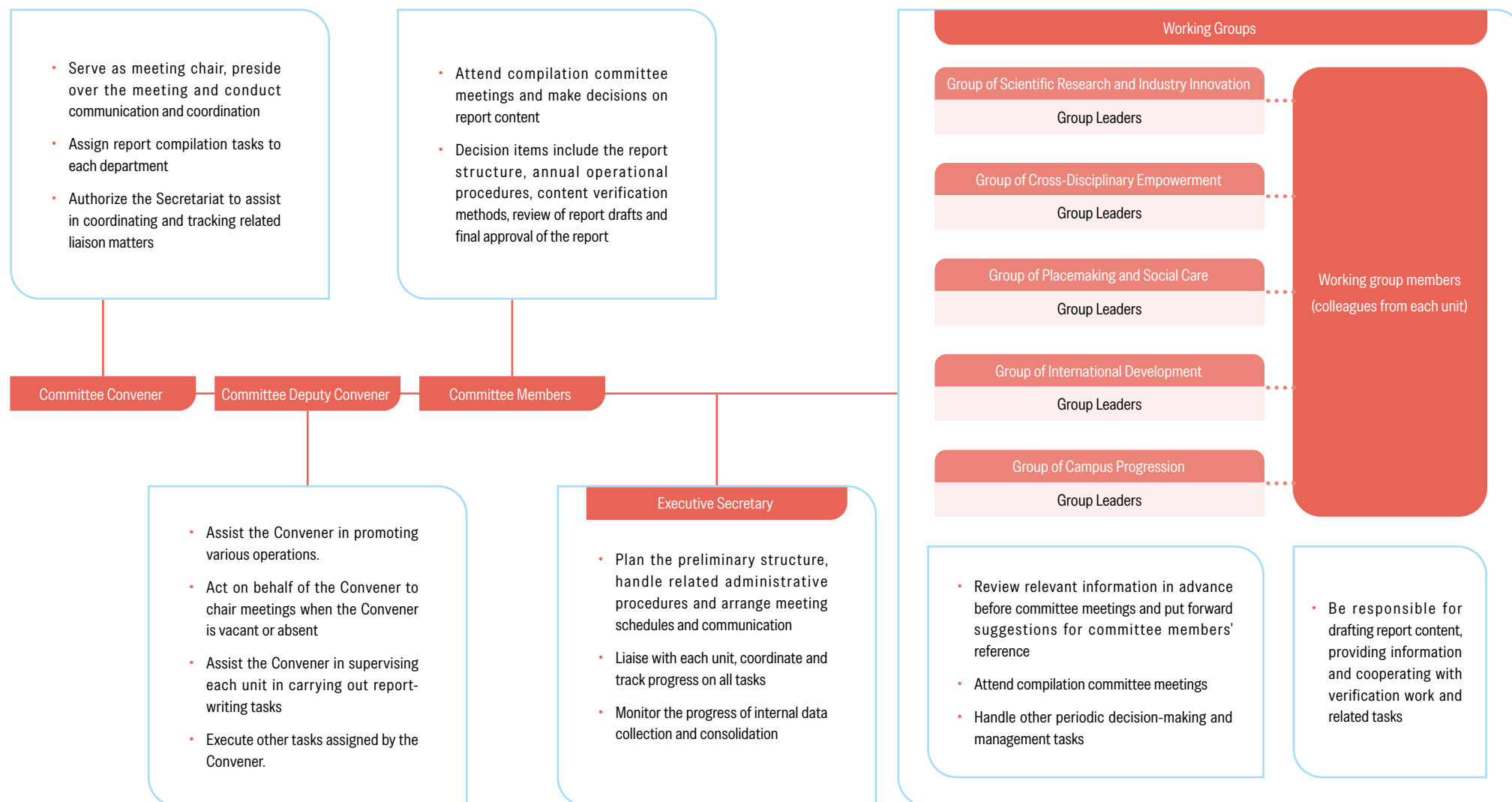


Outcome Handbook



Organizational Structure and Tasks of the Sustainability Report Compilation Committee and Working Group

In response to the compilation of the sustainability report, our university has established a Compilation Committee to differentiate various levels of work and ensure the implementation of related tasks. The committee regards the University Council as the highest governing body, with the principal serving as the representative and convener. Several members decide on the main content and compilation, while the executive secretary team acts as a bridge between various working groups. By establishing the compilation committee and clarifying responsibilities, we aim to fully coordinate, summarize, and showcase the school's sustainable highlights.



∴ Professional expertise and collective knowledge of the highest governance body in sustainable development

Committee Member	Professional Background	Environment (E)	Society (S)	Governance (G)
Convener Yang	Computational Heat Transfer Problems, Inverse Vibration Problems, and Software Engineering	8 hours (Sustainability related)		
Vice Convener Kuo	Fuel Cell Systems, Micro-Combustion, and Fluid Mechanics	48 hours (Carbon related)		
Committee Member Wei	Financial Behavior, Derivative Products, and Market Microstructure			137 hours (Financial governance) 8 hours (Internal Control)
Committee Member Hsieh	Food Hygiene Testing and Analysis, Molecular Biology, and Nutrition	12 hours (Sustainability related)		122 hours (Food Safety Management)
Committee Member Hsu	Analysis of Zero-Energy Buildings, Concrete Engineering, and Structural Life Cycle	6 hours (Sustainability report compilation)		
Committee Member Lin	Productivity Assessment and Control, System Dynamics		42 hours (Occupational Health and Safety)	
Committee Member Wu	Solid Waste Management, Chemical Thermodynamics, Environmental Engineering	3 hours (Carbon related)		9 hours (Risk management)
Committee Member Hsieh	Medical and Assistive Device Design and Development, Opto-Mechanical-Electrical Integration Design, Microelectromechanical Systems	48 hours (Carbon related)		
Committee Member Tseng	Marine Insurance, Cargo Loss Claims, and Shipping Risk Management		130 hours (Occupational health and safety)	
Committee Member Tsai	Natural Product Chemistry for Disease Prevention, Lipid Chemistry, and Food Chemistry			40 hours (Quality management systems)
Committee Member Yao	Calculus, Fiscal Issues, Public Issues Economics	8 hours (Sustainability related)		

2.1.2

Internal Control Mechanisms and Risk Management

To strengthen the internal control system and ensure its continued effective operation, NKUST promotes risk management with reference to the "Handbook for Risk Management and Crisis Handling of the Executive Yuan and Affiliated Agencies" and the "Principles for Promoting Risk Management and Internal Control in the Ministry of Education". With the primary objectives of (1) achieving policy goals, (2) enhancing policy effectiveness, (3) providing reliable information, (4) complying with laws and regulations and (5) safeguarding assets, NKUST has formulated its **Internal Control System Manual**. In addition, our university has established the 'Guidelines for the Establishment of National Kaohsiung University of Science and Technology Internal Control Group' and the 'Guidelines for the Establishment of National Kaohsiung University of Science and Technology Internal Audit Group'. Two Vice Presidents appointed by the President respectively lead the university's Internal Control Group and Internal Audit Group. Meetings are convened at least once per semester. The results of the implementation of internal control and internal audit are documented in the Internal Control Statement, which is jointly signed by the internal control convener, internal audit convener, and the president. Detailed execution details and processes are all disclosed on the university's website in the section providing public access to school affairs information and internal control and audit execution status.



Implementation Status
of Internal Control and
Internal Audit



Internal Control

According to: Guidelines for the Establishment of the Internal Control Group at National Kaohsiung University of Science and Technology.

The Internal Control Group's tasks are as follows:

- Conduct internal control and internal audit operations, as well as related training and education.
- Review and enhance existing internal control operations.
- Integrate and review internal control operations for various business activities.
- Adopt common operational guidelines established by relevant authorities for internal control systems, and assess the significance and risk of individual business activities to formulate appropriate internal control systems and promote risk management practices.
- Plan and execute self-assessment activities for the internal control system.
- Matters assigned by the Principal or other items decided upon by this group for implementation.

Description of Execution Focus

- Risk Assessment: In accordance with NKUST's medium-term development plan, each department conducts regular risk assessments. The risk assessment results for 2024 indicate a total of 366 risks, of which 34 have a residual risk value of 3 or higher (high risk), 154 have a residual risk value of 2 (medium risk), and 78 have a residual risk value of 1 or below (low risk).
- Internal Control: Items with a residual risk value of 3 or higher and those deemed significant are included in the internal control system. In 2024, 58 items were incorporated, and the internal control manual was revised and disclosed. Relevant departments shall assess the effectiveness of the five elements of internal control based on their respective responsibilities.
- Business Process SOP: To enhance administrative efficiency, each department should design comprehensive business process SOPs and upload them to the system for colleagues to consult and follow. The risk assessment is reviewed and updated regularly every year. As of the end of December 2024, the system contained 767 business process SOPs established by various administrative units.



Internal Audit

According to: Guidelines for the Establishment of the Internal Audit Group at National Kaohsiung University of Science and Technology.

The Internal Audit Group's tasks are as follows:

- Develop annual audit plans, execute them, and conduct self-assessments of internal control systems for various units, including evaluating plan implementation and reviewing the results.
- Review the internal control system evaluation process and conduct internal audit work.
- Review and evaluate the operational matters of each unit, and provide timely improvement recommendations to reasonably ensure the achievement of objectives.
- Internal audit findings and improvement recommendations will be submitted to the Principal for their awareness, and the implementation of improvements will be tracked.

Description of Execution Focus

- The Internal Audit Group of NKUST is a task force comprised of 24 audit committee members. These members are composed of senior staff or professional faculty with expertise in administrative practices. The group is responsible for examining and reviewing internal control systems, developing an annual audit plan, and writing audit reports. The reports include strengths, weaknesses, and recommendations for improvement, which are submitted to the Principal for their awareness. Regularly track deficiencies and recommendations identified in internal control evaluations and audit reports. In 2024, two internal control deficiencies and 54 audit deficiencies were tracked. The tracking results will be submitted for review at the Internal Audit Group meeting.

Information Security and Risk Management

To effectively implement the information security management system, the Computer and Network Center has established an information security organization dedicated to executing and maintaining information security related tasks. This organization issues information security policies approved by senior management to ensure that the policy content is fully communicated to all staff. To identify and assess potential information security risks, NKUST has completed risk assessment procedures and, based on the assessment results, formulated appropriate risk treatment plans and implemented corresponding control measures in each security control domain. To ensure the effectiveness of those measures, NKUST conducts internal audits annually to examine whether each control measure complies with established standards and requirements. In addition, NKUST reviews the information security management system each year to ensure its continued applicability, appropriateness and effectiveness, while simultaneously reviewing the implementation status of improvement mechanisms. To comply with laws and institutional requirements, all necessary information security management system documents have been fully documented, properly retained and controlled. Overall, following the ISO/IEC 27001 Information Security Management System (ISMS) requirements, the Computer and Network Center has established and implemented internal control mechanisms.

Implementation Status of the University Affairs Suggestion System

To keep communication channels open, promptly handle and resolve issues raised by Engaged Stakeholders and other interested parties, NKUST has established the "University Affairs Suggestion System", which also serves as a grievance channel and is a public system open to all users. The system went live in 2019. Through this system, the Secretariat assigns cases to responsible units and requests that those units process the case and reply to the suggester within five working days. On a monthly basis, the Secretariat compiles and analyzes statistics on suggestion cases and satisfaction with responses, summarizes key issues raised and requests competent units to evaluate and pay attention to them. After the report is signed off, it is circulated to all administrative and academic units for information. In 2024, the execution rate for responses to University Affairs suggestions reached 100%. The implementation status is as follows:

Statistics of University Affairs Suggestions over the Past Three Years

Year	2024	2023	2022
Number of Cases	590	491	441

Number and percentage of University Affairs Suggestions by type in 2024

Scope	University Affairs	General Affairs	Academic Affairs	Student Affairs	Other
Number of Cases	98	153	166	67	106
Proportion	17%	26%	28%	11%	18%

Targets of University Affairs Suggestion Messages in 2024

Target	Student	Faculty and staff	Alumni	Parents	General Public	Total
Number of Cases	481	42	16	17	34	590
Proportion	82%	7%	3%	3%	6%	100%

Satisfaction with Responses to University Affairs Suggestions in 2024

Satisfaction Level	Number of Cases	Proportion (%)
Very Satisfied	60	10%
Satisfied	40	7%
Acceptable	26	4%
Needs Improvement	22	4%
Dissatisfied	48	8%
No Satisfaction Feedback Provided	394	67%
Total	590	100%





Audit of school funds

➤ According to: Implementation Measures for Auditing the school fund of National Kaohsiung University of Science and Technology.

➤ Audit Task

The audit of school funds is conducted by auditors based on the results of internal control risk assessment, an annual audit plan will be formulated and executed with the principal's approval. Additionally, an annual audit report will be prepared and presented to the University Council. Each year, we track and monitor any deficiencies or abnormalities until they are resolved. The scope of the audit is as follows:

- Post-audit of personnel, financial, operational, and related party transactions involving the cycle of school fund transactions (including revenue cycle, procurement and payment cycle, payroll cycle, asset management cycle, investment cycle, financing cycle, and research and development cycle).
- Post-audit of cash receipts and bad debt handling.
- Audit and inventory of cash, bank deposits, securities, stocks, bonds, and fixed assets.
- Regular evaluation, auditing, and compilation report on the achievement of performance goals for various operations of the school fund.
- Audit and evaluate the efficiency of school fund utilization and the effectiveness of various expenditures.
- Other project audit matters.

➤ Audit Members

To conduct audit-related matters, the School Fund Audit Committee in 2024 was formed by selecting 8 members. These members were chosen by the President from a pool of faculty members nominated by each college who possess audit experience and relevant professional backgrounds. The committee also includes the group leader and personnel of the Legal and Audit Division. One member was designated as the convener.

➤ Audit Results

In 2024, a total of 15 School Fund audit items were carried out across 10 units. Five audit meetings and one on-site sampling inspection were held to complete the review. Based on the audit results, 63 improvement measures or reform recommendations were proposed for identified issues or deficiencies; among these, 26 items were completed and closed, while 37 items remained under tracking. Of the 65 historical audit improvement measures or reform recommendations, 52 have been completed and removed from monitoring. 13 remain outstanding. Adding 37 items scheduled for improvement in 2024, a total of 50 items will be included for continued monitoring and tracking in 2025.

2.1.3

Financial Information

Committee for the Management of Endowment Funds

In accordance with Article 5 of the 'National University Endowment Fund Establishment Act' and Article 7 of the 'Regulations Regarding the Management and Supervision of School Funds at National Universities/Colleges' hereby establishes the 'Guidelines for National Kaohsiung University of Science and Technology's Establishment of School Funds Management Committee'. This committee is responsible for reviewing the annual budget of the school fund as well as the utilization performance, the annual planning and investment planning, self-generated revenue and expenditure management regulations, and the plan for increasing revenue and reducing expenses. The committee shall hold meetings at least once per semester and may convene special meetings when necessary.

The committee shall consist of 11 to 15 members, including the President, Vice President, Director of Finance, Dean of Academic Affairs, Dean of General Affairs, Dean of Research and Development, and Director of Accounting as ex officio members. The President shall serve as the convener. The remaining members shall be selected by the President and appointed after approval by the University Council. Among the committee members, at least one-third shall be non-administrative faculty representatives, and one external professional and one student representative may also be appointed. The term of office for committee members is two years.

Members of the School Fund
Management Committee at NKUST

(Unit: Person)

Convener/Ex-Officio Committee
Member

1

Ex-Officio Committee Member
(Administrative Position)

6

Faculty Representative (Not holding an
administrative position)

6

External Committee Members Recruited
From Outside the University

1



Student Representative

1

Total 15

According to Article 3 of the Regulations for the Establishment of the School Fund Management Committee, the Committee's tasks are as follows:

- 1 Review of the annual budget proposal for the school funds.
- 2 Assessment of the income and expenditure as well as the utilization performance of the school fund.
- 3 Deliberation on annual financial planning and annual investment planning.
- 4 Review of self-generated revenue and expenditure management regulations.
- 5 Review of the school fund's revenue and cost reduction plan.
- 6 Review of the allocation ratio of administrative management fees or surplus funds from self-generated revenue.
- 7 Examining the allocation, terms, methodologies, and assessment criteria for personnel expenses funded by self-generated revenue.
- 8 Review of the performance report of the school fund.
- 9 Deliberation on the financial statements and Board meeting minutes of the National Kaohsiung University of Science and Technology Foundation for Education and Culture.
- 10 Other matters concerning budgeting, income and expenses, custody, and utilization of the school funds were deliberated.

The following table presents NKUST's 2024 school funds amount, with operating revenues of NT\$5,378,673,000, non-operating revenues (including investment income) of NT\$365,634,000, operating costs and expenses of NT\$5,775,370,000, and non-operating expenses of NT\$115,323,000. Among them, the revenue and costs of industry-academia collaboration come from related projects in collaboration with industry and academia. The revenue from teaching and research subsidies and other subsidies from the government amounts to a total of NT\$2,796,549 thousand. Detailed revenue and expenditure information is disclosed publicly online. For details, please refer to the [School Fund Performance Report](#).



School Fund
Performance
Report

∴ Overall Performance of the 2024 School Fund Settlement

Unit: NT\$ Thousand

Revenue and Expenditure	Item	Amount
Revenue	Business Revenue	5,378,673
	Other Business Revenue	365,634
Expenditure	Operating costs and expenses	5,775,370
	Non-operating expenses	115,323

∴ 2024 Sources of Business Revenue and Expenditure Category Amounts and Ratios

Unit: NT\$ Thousand

	Amount	Ratio (%)
Source of Income	Tuition and Miscellaneous Fees Revenue	1,247,756
	Revenue From Industry-Academia Collaboration	1,207,194
	Income from Continuing Education	106,290
	Royalty Income	2
	Revenue From School Teaching and Research Grant	2,206,195
	Other Subsidy Income	590,354
	Miscellaneous Business Revenue	20,882
	Total	5,378,673
Source of Expenditure	Costs of Teaching, Research, and Counseling	3,944,515
	Cost of Industry-Academic Collaboration	1,039,877
	Cost of Continuing Education	105,938
	Student Scholarships and Incentives	168,708
	Management and General Affairs Expenses	499,165
	Other Operating Expenses	17,167
	Total	5,775,370
		100%

The financial statements of our university are prepared using the accrual basis of accounting

2.1.4

Investment Management and Sustainable Investing

To ensure the sustainable operation of the School Fund and enhance its investment efficiency, NKUST, in accordance with the "National University Endowment Fund Establishment Act", the "Regulations Regarding the Management and Supervision of School Funds at National Universities/Colleges" and NKUST's Directions for the Management of Investment Revenues and Expenditures, prepares an annual "School Fund Investment Plan." The plan is submitted to the Investment Management Team and the School Fund Management Committee for review and is incorporated into the School Fund Financial Planning Report, which is approved by the University Affairs Meeting and then submitted to the Ministry of Education for record.

Investment Targets and Scale of School Fund

In accordance with Article 14 of the Ministry of Education's "Regulations Regarding the Management and Supervision of School Funds at National Universities/Colleges", and taking into account the safe cash reserve level of the University, the Investment Management Task Force resolved in its August 2023 meeting to raise the upper limit of investable funds for the School Fund to 28.30% of available funds, or NT\$1.5 billion. Going forward, the investable limit will be adjusted on a rolling basis in line with developments in international financial markets and the asset allocation scale of the School Fund, once relevant procedures are completed. By the end of 2024, the total amount actually invested reached NT\$941,655,194. The School Fund's investment targets and amounts from 2022 to 2024 are summarized in the following table:

∴ Target and Scale of School Funds Investment in the Past 3 Years ¹

Unit: NT\$ Thousand

Year		2022	2023	2024
Investment Targets and Amounts ²	Overseas Bonds	403,176	334,929	604,683
	Mutual Fund	51,441	30,131	40,295
	Taiwan Stock ETF	96,728	41,987	296,677
Scale of School Fund Investments		407,047	551,345	941,655

¹ For each amount listed in the table, Taiwan stock ETFs are denominated in New Taiwan dollar (NT\$), while the NT\$ figures for overseas bonds and mutual funds are converted based on the NT\$ amount booked at the time of each individual subscription to the relevant investment target. For overseas bonds, the amounts are recorded in accordance with accounting regulations as amortized carrying amounts in NT\$.

In 2024, investments of the School Fund (excluding time deposits) were allocated approximately as follows: 30%-40% to investment-grade overseas bonds, government bonds, treasury bills and convertible bonds; 10%-20% to common equity, preferred stock or ETFs; 5%-10% to mutual funds; and about 30%-55% to cash or other investment targets that comply with the governing Act and have been approved by the School Fund Investment Management Task Force. The asset allocation ratio is adjusted flexibly in response to economic conditions. In 2024, the top five industries by investment weight were Taiwan equity ETFs, technology, communication services, information technology and healthcare. The industry distribution of major School Fund investment targets is summarized in the following table:

∴ The major industry distribution of the 2 school fund investments²

ICB				
Major Investment Targets and Scale of School Fund	Investment Amount (USD)	Investment Amount ³ (TWD)	Percentage (%)	ESG Proportion (%)
Taiwan Stock ETF		296,676,916	32%	0.00%
Technology	5,400,287.38	176,778,407	19%	100.00%
Healthcare	3,639,510.85	119,139,388	13%	100.00%
Telecommunications	2,362,243.53	77,328,042	8%	100.00%
Consumer Staples	2,258,964.47	73,947,202	8%	100.00%
Consumer Discretionary	1,639,576.46	53,671,535	6%	100.00%
Finance	1,618,660.15	52,986,840	6%	100.00%
Others (Sovereign)	1,233,261.00	40,370,799	4%	0.00%
Fund	1,285,711.51	40,295,281	4%	0.00%
Basic Materials/Raw Materials	319,559.62	10,460,784	1%	100.00%
Total		941,655,194	100.00%	

GICS				
Major Investment Targets and Scale of School Fund	Investment Amount (USD)	Investment Amount ³ (TWD)	Percentage (%)	ESG Proportion (%)
Taiwan Stock ETF		296,676,916	32%	0.00%
Communication Services	4,685,167.73	153,368,966	16%	100.00%
Information Technology	3,744,644.86	122,580,949	13%	100.00%
Healthcare	3,639,510.85	119,139,388	13%	100.00%
Consumer Staples	2,458,767.75	80,487,762	9%	100.00%
Finance	1,618,660.15	52,986,840	6%	100.00%
Others (Sovereign)	1,233,261.00	40,370,799	4%	0.00%
Fund	1,285,711.51	40,295,281	4%	0.00%
Consumer Discretionary	772,491.50	25,287,509	3%	100.00%
Raw Materials/Basic Materials	319,559.62	10,460,784	1%	100.00%
Total		941,655,194	100.00%	

² Industrial categories for investment are classified according to the Global Industry Classification Standard (GICS), developed jointly by MSCI and Standard & Poor's, and the Industry Classification Benchmark (ICB), an industry classification system launched in 2005 by Dow Jones and FTSE Russell. Both standards are widely used global industry classification methods. To unify the currency unit, industries are ranked primarily by total NT\$ investment from largest to smallest.

³ Except for Taiwan stock ETFs, which are priced in New Taiwan dollars, the New Taiwan dollar amounts for overseas bonds and mutual funds are based on the actual New Taiwan Dollar exchanged at the time of purchase for each specific item, reported to NKUST's Accounting Office. The amount for overseas bonds is also based on the book value in New Taiwan dollars after amortization, as required by the Ministry of Education. As Taiwan stock ETFs are priced in New Taiwan Dollars only, the investment proportion is calculated in New Taiwan Dollars to facilitate the estimation of the overall allocation.

To shape sustainable operations within science and industrial parks and to build a green supply chain, NKUST has, since 2020, participated in the Asia Sustainable Supply and Circular Economy Expo through its membership in the Taiwan Alliance for Sustainable Supply. Leveraging this platform, NKUST showcases the circular economy research and development capacity of its faculty. Over the years, the Expo has become Taiwan's most renowned platform for sustainable supply and circular economy. In addition, by consolidating consensus on the development of the passive component industry, NKUST acted as a co-founder of Taiwan's first passive component industry association, the Taiwan Passive Component Industry Association, in 2022. NKUST continues to serve as a bridge between government and industry, helping the passive component sector develop advanced technologies and high-end products.



2024 Sustainability Month Series - Opening Forum and Advocacy



2024 Sustainability Month Series event photos



12th Southern Region Vocational College Intercollegiate Integration Alliance
1st Meeting of the Steering Committee and the Executive Committee

2.2.2

International Cooperation Alliance

NKUST currently participates in six important international alliance organizations. By forming alliances with other international institutions, we jointly formulate specific cooperation strategies that benefit all alliance schools, strengthen international partnerships, enhance respective images and competitive advantages, and establish a close interactive international network.

	TAItech-HAWtech Alliance (HAWtech-TAItech)		Taiwan-Japan Alliance	
Time	2021 to 2022	From 2024 onward	Since 2022	Continued collaboration in 2024
Activities	Served as rotating Chair of TAItech, coordinated activities and bilateral exchanges and convened online consensus meetings	- Proposed teaching collaboration projects and submitted concept papers - Visited laboratories of the German HAWtech universities of applied sciences - Participated in the HAW roundtable meeting and completed renewal of the collaboration agreement - Overview of alliance composition	Invited Japanese professors to give lectures in placemaking and local revitalization courses and upgraded courses to English-medium instruction	- Held leadership meetings, seminars, workshops, cross-border courses and competitions - Offered cross-border co-taught courses and trained international students as teaching assistants (TAs)
Results	Presented alliance work reports and shared results on SDG implementation  TAItech-HAWtech Alliance	- Formed two research teams to promote faculty exchanges and collaborative research - Promoted bilateral faculty exchanges and research collaboration - Deepened the collaborative relationship - Building a closely connected international network	Promoted international collaborative courses on local revitalization	- Organized summer exchange visits for faculty and students to Japan - Supported teaching activities and overseas internships

2.2.3

Sustainability-related Alliances and Projects

NKUST is committed to sustainable development and actively builds strong partnerships with various sectors to jointly promote the realization of sustainable development goals. The Office of Industry-Academia Cooperation maintains close contact with multiple long-term partners, including GLORIA SOUTH, corporate members of industry-academia collaboration, the Taiwan Passive Component Industry Association and the Taiwan Alliance for Sustainable Supply, thereby building a robust collaboration network. The sustainable counseling framework promoted by NKUST emphasizes the concurrent deployment of talent and technology and closely aligns with the development dynamics of various industries. NKUST focuses on developing technology domains related to sustainability topics, enabling industries to align with their future development pathways. By linking NKUST's internal resources with external platforms, the University maximizes resource sharing and ensures seamless interconnection between platforms.



Building Platforms

By leveraging a technical database and patent search platform that aggregates expertise from more than 800 professional faculty members across diverse fields, and integrating services such as proactive matchmaking by project managers, administrative support and industry intelligence promotion, NKUST successfully facilitated 174 collaboration projects in 2024, with a total amount of NT\$121,059,162. Through this platform, enterprises can quickly match their proposed problem statements with potential solutions and identify suitable experts to provide guidance. Member companies, university-run enterprises and alumni-founded startups all benefit from this convenient one-stop service platform that drives their subsequent development. This precise matchmaking approach helps enterprises significantly reduce the time costs associated with searching for suitable solutions across a vast landscape of options.

Expanding Resources

Under the GLORIA SOUTH program promoted by the National Science and Technology Council, NKUST works with 11 alliance universities in southern Taiwan (National Cheng Kung University, National University of Tainan, National Kaohsiung University of Science and Technology, National Pingtung University, Chung Shan Medical University, National Tainan Junior College of Nursing, Kun Shan University, National Formosa University, Cheng Shiu University, CTBC University of Technology, and Southern Taiwan University of Science and Technology). Together, they integrate resources in industry-academia alliances, technology transfer and startups to provide comprehensive services in technology, talent and patents. Through a membership system and co-research centers, the platform promotes cross-campus cooperation between enterprises and universities, accelerating the commercialization and implementation of scientific research outcomes. In 2024, the platform delivered impressive results: five scientific and technological innovation project applications were submitted, four new domestic member institutions were added and the alliance participated in multiple promotional events, such as BIO ASIA and long-term care assistive device exhibitions. With its "industry demand-oriented" strategy, the platform has enabled numerous collaborations and technology licensing projects with real monetary value, effectively facilitating the implementation and value transformation of university R&D results.



Assistive Technology for Life Taiwan



2024 BIO Asia-Taiwan

Pursuing Sustainability

In response to the "Outline Plan for the Net-Zero Emission Pathway (2023-2026)" approved by the government in 2023, NKUST collaborated in 2023 and 2024 with TUV, SGS and professional training institution AFNOR to offer the "ISO 14067 Carbon Footprint Standard Lead Verifier Training Course," the "ISO 14064-1:2018 Greenhouse Gas Inventory Lead Verifier Training Course" and the "ISO 50001:2018 Energy Management Systems Lead Auditor Training Course (IRCA No. 2142-PR 366)." A total of 110 NKUST faculty and staff members and managers from partner enterprises successfully completed the training and obtained certification, thereby expanding the University's professional capacity for sustainability and carbon reduction consulting. This effort also prepares seed instructors for the S-corridor technology industry cluster and traditional industries and actively builds a pipeline for cultivating green-collar talent. In addition, NKUST recently launched practice-oriented case study training courses focused on sustainable supply chains, circular economy, net zero emissions and digital innovation, integrating hands-on use of AI tools. These courses will continue to help corporate decision-makers strengthen their analysis of sustainable development blueprints and implementation strategies.

2.3

Workforce Diversity

2.3.1

Diverse and Equal Workplace



The university upholds its commitment to human rights, equality, and diversity in talent recruitment, regardless of gender, age, race, or other differences. We strive to create an inclusive work environment where everyone can fully unleash their potential and achieve their professional goals. The following tables summarize the number of individuals as of the end of December 2024 who met the criteria for each category in NKUST's internal database during the period from January 2024 to the end of December 2024. In 2024, the total number of faculty and staff at NKUST was 3,337. Of this number, the percentage of indigenous faculty and staff at our university was 0.74%, while the percentage of individuals with disabilities was 3.18%. The figures in the tables summarize the number of individuals as of the end of December 2024 who met the criteria for each category in NKUST's internal database during the period from January 2024 to the end of December 2024.

∴ Gender Statistics of Faculty and Staff

Type	Number of males (people)	Ratio of males	Number of females (people)	Ratio of females	Total (people)
Full-time faculty	653	76%	208	24%	861
Part-time faculty	116	67%	58	33%	174
Subtotal	769	74%	266	26%	1,035
Regular staff	88	37%	149	63%	237
University-endowed staff	110	25%	329	75%	439
Project-based employees	244	40%	362	60%	606
Project researchers	9	75%	3	25%	12
Part-time assistants	553	55%	455	45%	1,008
Subtotal	1,004	44%	1,298	56%	2,302
Total	1,773	53%	1,564	47%	3,337

∴ Age Statistics of Faculty and Staff

Type	Number of people under 30	Percentage	Number of people aged 31-50	Percentage	Number of people over 51	Percentage	Total
Full-time faculty	3	0%	259	30%	599	70%	861
Part-time faculty	2	1%	60	35%	112	65%	174
Subtotal	5	0%	319	31%	711	69%	1,035
Regular staff	5	2%	82	35%	150	63%	237
University-endowed staff	52	12%	300	68%	87	20%	439
Project-based employees	224	37%	328	54%	54	9%	606
Project researchers	1	8%	8	67%	3	25%	12
Part-time assistants	947	94%	48	5%	13	1%	1,008
Subtotal	1,229	53%	766	33%	307	13%	2,302
Total	1,234	37%	1,085	33%	1,018	31%	3,337

∴ Regional Statistics of Faculty and Staff

Type	Citizen	Percentage	Foreigners	Percentage	Total
Full-time faculty	843	98%	18	2%	861
Part-time faculty	171	98%	3	2%	174
Subtotal	1,014	98%	21	2%	1,035
Regular staff	237	100%	0	0%	237
University-endowed staff	439	100%	0	0%	439
Project-based employees	594	98%	12	2%	606
Project researchers	9	75%	3	25%	12
Research assistant (0.2 FTE)	974	97%	34	3%	1,008
Subtotal	2,253	98%	49	2%	2,302
Total	3,267	98%	70	2%	3,337

Statistics on Changes in the Number of Faculty and Staff in the Past 3 Years

Type	Total Number of Personnel in 2024	Total Number of Personnel in 2023	Total Number of Personnel in 2022
Full-time faculty (Including project teachers, instructors, and teaching assistants, excluding those on leave without pay)	861	860	838
Part-time faculty	174	174	165
Subtotal	1,035	1,034	1,003
Regular Staff (including technicians, maintenance workers, and security guards)	237	253	272
University-endowed staff	439	444	462
Project-based employees	606	619	621
Project researchers	12	16	35
Part-time assistants	1,008	1,004	1,029
Subtotal	2,302	2,336	2,419
Total	3,337	3,370	3,422

The new hire and turnover rate of faculty and staff in 2024 (excluding part-time assistants)

Unit: person

Categories of Faculty and Staff		Total Number of People at NKUST	Number of New Hires	New Hire Rate	Number of Resignations	Turnover Rate
Teachers	Male	653	36	6%	5	1%
	Female	208	5	2%	0	0%
	Under 30	3	1	33%	0	0%
	31-50 years old	259	36	14%	2	1%
	Over 51	599	4	1%	3	1%
	Total	861	41	5%	5	1%
Staff	Male	454	37	8%	97	21%
	Female	847	91	11%	135	16%
	Under 30	281	64	23%	106	38%
	31-50 years old	723	50	7%	103	14%
	Over 51	297	14	5%	23	8%
	Total	1301	128	10%	232	18%

Weekly Working Hours Statistics of Faculty and Staff

Unit: hour

Type	Weekly Working Hours
Full-time faculty (Including project teachers, instructors, and teaching assistants, excluding those on leave without pay)	40
Part-time faculty	4
Regular staff	40
University-endowed staff	40
Project-based employees	40
Part-time assistants	10
Part-time teaching assistants	8

Basis for the Employment of Various Staff Members

Full-time faculty

- According to the Act Governing the Appointment of Educators, the Regulations for the Appointment of Full-Time Faculty, and the Qualification Review Criteria for Newly Hired Full-time Faculty in Each College.
- Candidates who meet the criteria for competitive positions will be appointed as full-time faculty members in accordance with the Guidelines for Appointment of Competitive Tenure-Track Faculty Positions.
- Project teachers are employed in accordance with the Regulations for the Appointment of Full-Time Faculty, and the relevant points regarding the employment of non-staff teaching personnel from the school funds.

Civil Servants

- This is based on the provisions of the Civil Service Examinations Act, the Civil Service Appointment Act, the Regulations Governing the Transfer of Incumbent Civil Servants, and the Civil Service Promotion Act.
- The employment of technicians, maintenance workers, and security guards must be handled in accordance with the Operational Guidelines for the Management of Staff Quotas in Central Government Agencies and Schools, and cannot be processed as new hires.

➤ **The staff employed by the school fund:** In accordance with Article 14, Section 5 of the University Act and the relevant implementation principles of the Ministry of Education, the National Kaohsiung University of Science and Technology has established the Regulations for the Employment and Management of Staff Using School Funds.

➤ **Project staff:** Employed using subsidies or project funds and are subject to the Labor Standards Act. Their management is governed by the Guidelines for the Management of Project Staff.

➤ **As all personnel serve at NKUST, the data are presented without regional breakdown.**

Contracted Deployment of Employees

- ✦ NKUST employed 113 contract service personnel (as of December 31, 2024). As all personnel serve at NKUST, the data are presented without regional breakdown.
- ✦ Our school's use of contracted labor follows the 'Reference Principles for the Use of Labor Contracting by Government Agencies (Institutions)' established by the Ministry of Labor and the 'Guidelines for Promoting Business Entrustment to Private Entities at National Kaohsiung University of Science and Technology.' We adhere to these regulations to ensure the reasonable utilization and protection of the labor rights of contracted dispatched personnel. It is explicitly stated that the contracted labor personnel shall not be directly supervised or managed in their work, but rather their work should be evaluated based on contractual requirements related to performance or quality. The specific scope of the contracted services, as well as the criteria for acceptance, should be clearly defined in the labor service contract.

∴ The following work items are as follow:

①	Operation and maintenance of campus sewage treatment plants.
②	Campus waste collection and resource recycling classification.
③	Campus cleaning and maintenance.
④	Campus cleaning and maintenance.
⑤	Campus planting maintenance.
⑥	Campus security and guard duty.
⑦	Maintenance of campus computer network.
⑧	Campus air conditioning equipment maintenance and servicing.



∴ The total number of contracted dispatched employees

Unit: person

Business Type	People
Cleaning	81
Computer Information Equipment Maintenance	1
Security	25
Engineering Technology, Construction, and Electro-Mechanical Maintenance	2
Other (Garbage Collection and Air Condition-ing Maintenance)	4
Total	113

DEI Treatment and Benefits for Faculty and Staff

NKUST is committed to creating a diverse, equitable and inclusive workplace environment. On the personnel policy front, NKUST has established flexible and diversified "Faculty Qualification Review Regulations" that value teaching, research and practical experience to ensure that all types of professionals can participate fairly in faculty recruitment and selection. To implement gender equality, NKUST actively promotes awareness and institutionalization of the Act of Gender Equality in Employment and the Sexual Harassment Prevention Act, and provides a gender-friendly work environment and complaint mechanisms. In addition, NKUST organizes an annual model staff selection to recognize employee contributions, promote a positive workplace culture and foster an organizational climate that values diversity and encourages excellence. Through these measures, NKUST demonstrates its strong commitment to protecting employee rights and promoting workplace inclusion. Relevant regulations are available on the [public website](#).

2.3.2

Remuneration and Benefits Policy

Salary adjustments for all personnel categories within this institution are conducted in accordance with the corresponding regulations and align with the Ministry of Labor's requirements. In the event that the Ministry of Labor announces alterations to the current year's minimum wage, these adjustments will be implemented accordingly. Proposed revisions are formulated by the institution's personnel office and are subject to approval by both the administrative council and the school fund management committee. This process ensures the protection of the rights and interests of all personnel categories within the institution. In 2024, the minimum living expense level in Kaohsiung was NT\$16,040, and 100% of employees received pay higher than the minimum living expense level.

∴ Average Monthly Salary of Employees over the Past Three Years, Statutory Minimum Basic Wage and Highest Salary in the Year

Type	2024 Average Monthly Salary	2024 Highest Salary	2023 Average Monthly Salary	2023 Highest Salary	2022 Average Monthly Salary	2022 Highest Salary
Full-time faculty	NT\$119,504	NT\$173,720	NT\$110,043	NT\$160,400	NT\$110,227	NT\$160,400
Project researchers (Project-based teaching staff, project-based faculty)	NT\$85,378	NT\$101,890	NT\$66,681	NT\$97,420	NT\$63,593	NT\$107,070
Regular Staff (Civil Servants)	NT\$73,301	NT\$114,910	NT\$68,290	NT\$109,560	NT\$67,564	NT\$109,560
Contracted Employees	NT\$37,979	NT\$146,561	NT\$36,275	NT\$146,561	NT\$35,278	NT\$57,720
Statutory Minimum Wage	NT\$27,470	-	NT\$ 26,400	-	NT\$ 25,250	-

Remuneration Policies and Procedures

Civil Servants and Teaching Personnel:

1. Provided under the provisions of the 'Guidelines Governing the Payment of Remuneration to Military, Civil Servants and Teachers'.
2. To support the academic development, the 'Regulations on Payment of Remuneration for Teachers and Researchers Concurrently Serving in Non-Organizational Managerial Positions' have been established, allowing for the use of school funds to compensate for work performed in non-organizational managerial positions.

The staff employed by the school fund:

1. Salary payments for staff employed by the school's endowment fund shall be processed in accordance with the 'Salary Payment Standards For Employees Hired Under School Funds.' Refer to the National Salary Table for Military, Civil Servants and Teachers.
2. If adjustments are made to the salaries and benefits of military personnel, civil servants, and teachers, the Personnel Department will propose amendments based on the self-generated school funds.
3. Salaries must not be lower than the minimum wage announced by the Ministry of Labor. If the minimum wage is higher than the minimum monthly salary, the minimum wage shall be paid first, and relevant regulations shall be amended as soon as possible.
4. Technical personnel are eligible for professional allowances, and the salary scales and promotion regulations for all job titles and technical personnel are clearly defined.

The university does not provide severance pay for senior executives, and does not disclose data on the highest governance body.

Retirement System, Basis, and Benefits

NKUST's faculty retirement system is governed by the 'Public School Teachers Retirement and Severance Act'. The civil servant retirement system is governed by the 'Civil servants follow the Civil Servants Retirement and Severance Act'. The retirement system for technicians, maintenance workers, and security guards is governed by the 'Management Guidelines for Maintenance Workers and Security Guards', the 'Labor Standards Act', and the 'Labor Pension Act'. The retirement system for security guards is governed by the 'Management Regulations for the Establishment of Security Guards in Various Government Agencies, Schools, And Organizations'. The retirement system for staff employed by the school fund and project-based employees is governed by the 'Labor Standards Act' and the 'Labor Pension Act'.

Benefits Policy

- ✦ An annual special budget (sports activity fee) is allocated: NT\$3,000 for each current full-time faculty member (including project teachers) and staff members funded by the school.
- ✦ Implemented various benefit measures and cultural activities, including organizing birthday celebrations for faculty and staff, distributing birthday vouchers, providing subsidies for cultural activities, and conducting annual lucky draw prizes.
 - Contracted Stores: Continuously sign preferential consumption agreements with excellent vendors, expand the number and categories of contracted stores, and establish a special section for contracted store discounts on the [Personnel Office's website](#).
 - Childcare Services: Conduct an annual survey of employee needs based on their requirements and recommendations, negotiate and sign preferential contracts with childcare institutions.
 - Establishment of Faculty and Staff Activity Clubs: To promote healthy leisure activities, protect the physical and mental health of faculty and staff and foster campus harmony.
- ✦ Insurance: Provides group insurance with preferential rates for public sector employees.
- ✦ Loans: Including emergency loans (providing loans for medical care, funeral expenses, disasters, childcare, and long-term care for different types of accidents), preferential housing loans (nest advantage loan), and preferential consumer loans (considerate loan).
- ✦ In accordance with the Labor Standards Act, female workers must suspend work before and after childbirth and are entitled to eight weeks of maternity leave. Female workers who experience miscarriage after three or more months of pregnancy are entitled to four weeks of maternity leave. If a female employee has been employed for six months or longer, wages are paid in full during maternity leave; if she has been employed for less than six months, wages are paid at half salary. Maternity leave for childbirth is eight weeks (56 days). For employees who have worked for six months or longer, full pay is provided during maternity leave; for those who have worked for less than six months, half pay is provided during maternity leave.



Special section for
contracted store
discounts

∴ Parental Leave without Pay in the Past Three Years

Item	Year	Number of males		Number of Women		Total
		Subject to the Labor Stand-ards Act	Civil Servant	Subject to the Labor Stand-ards Act	Civil Servant	
Actual numbers of employees who used parental leave	2024	0	0	18	3	21
	2023	2	0	21	5	28
	2022	1	0	16	5	22
The total number of employees who were reinstated after completing pa-rental leave	2024	0	0	12	0	12
	2023	1	0	15	2	18
	2022	1	0	15	2	18

2.4

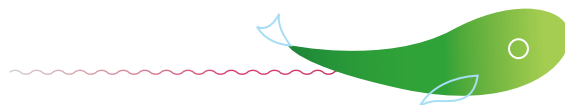
Gender Equality

Gender Equality Education Committee and Its Regulations

✚ In accordance with Article 2 of the Regulations for the Establishment of the Gender Equality Education Committee of NKUST, the Committee shall have 21 members. The President shall serve as the Chairperson, and shall designate one Vice President to serve as the Vice Chairperson and Executive Secretary. The Dean of Academic Affairs, the Dean of Student Affairs, the Dean of General Affairs, the Director of Personnel, and the Director of the Comprehensive Affairs Office shall serve as ex officio members. Three student representatives shall be recommended by the responsible unit, five teacher representatives, three staff representatives, and three experts and three scholars shall be selected and appointed by the President. The term of office shall be from August 1 of each year to July 31 of the following year.

✚ Responsibilities of the Gender Equality Education Committee are listed as follows:

- 1 Integrate relevant resources from various departments of the school, formulate a plan for implementing gender equality education, and implement and review its execution results.
- 2 Plan or organize activities related to gender equality education.
- 3 Develop and promote curriculum, teaching, and evaluation for gender equality education.
- 4 Draft regulations for implementing gender equality education and preventing campus sexual assault, sexual harassment, or sexual bullying, establishing mechanisms, and coordinating and integrating relevant resources.
- 5 Investigate and handle cases related to the Gender Equity Education Act.
- 6 Plan and establish a safe campus environment for gender equality.
- 7 Other matters regarding gender equality education.



Handling of Gender Equality Incidents and Grievance Mechanisms

- ✦ NKUST's "Directions for the Prevention, Complaint Handling and Disciplinary Actions for Sexual Harassment against Faculty and Staff" set out preventive measures, handling mechanisms, procedures and remedies for workplace sexual harassment incidents.

Workplace Sexual Harassment Complaint Channels



The announcement will be posted on the Personnel Office website under the Gender Equality section. They are also specified in the "Written Statement on Prohibiting Sexual or Gender-Related Professional Misconduct and Sexual Harassment," which all employees are asked to read carefully and sign.

Workplace Sexual Harassment Handling Mechanism



1. Upon learning of a workplace sexual harassment incident, NKUST immediately adopts corrective and remedial measures as set out in Item 6 of the Directions.
2. Within 20 days from the date on which the Gender Equality Education Committee receives a complaint or the complainant completes the required supplementary information, the Committee notifies the parties in writing whether the case has been accepted.
3. An investigation team is formed to conduct an investigation. After completing the investigation within the time limit specified in Article 17 of the Directions, the investigation report is submitted to the competent authority for review.

- ✦ Chapter Four of NKUST's Campus Sexual Assault, Sexual Harassment, or Bullying Prevention Regulations outlines the mechanisms, procedures, and remedies for handling incidents of sexual assault, sexual harassment, or bullying on campus.

- Article 11 of the Prevention Regulations stipulate that the unit responsible for receiving reports of gender equality incidents is the Gender Equality Committee, and the contact information is published on the university's website.
- According to Articles 13 and 16 of the Prevention Regulations, the Gender Equality Committee shall, within 20 days of receiving an application for investigation or a report, assign an incident handling team to review whether to accept the case and notify the applicant or reporter in writing. If an investigation team is to be established, it requires the approval of the Chairperson and will be reported at the next Gender Equality Committee meeting. The gender equality incident handling procedures are as follows:

Applicants or whistleblowers shall submit their requests for investigation or complaints in writing.

1

The Gender Equality Committee notifies the applicant and the involved party in writing of the processing results and provide an investigation report and inform them of the deadline for reapplication and the responsible department.

5

Upon receiving the application, the case will be transferred to the Gender Equality Committee for investigation within three working days.

2

Applicants or involved parties who are dissatisfied with the outcome may submit a written appeal to the Office of the Secretariat of this institution within 30 days from the day following the receipt of the notice, providing apparent reasons for their appeal.

6

The Gender Equality Committee will notify the applicant or complainant in writing within 20 days of the outcome of their application or complaint.

3

Upon receiving the application, the Office of the Secretariat shall form a review committee and make a decision within 30 days. The applicant shall be notified of the result in writing.

7

The Gender Equality Committee will complete the investigation within two months of receiving the case (this period may be extended if necessary) and submit a report and recommendations for handling to the relevant committees.

4

If dissatisfied with the result of the application, individuals may file an appeal with the Student Grievance Review Committee, Teacher's Grievance Review Committee, or the Staff Appeals Committee within 30 days from the day following the receipt of the notice.

8

➤ NKUST provides clear communication channels and establishes formalized, fair, and just grievance mechanisms. The following outlines the grievance mechanisms for students, faculty and staff, and previous gender equality-related grievance mechanisms are described as follows:

Student Grievance Channels

To safeguard students' learning, living, and educational rights, NKUST has established the 'Student Grievance Procedures at the National Kaohsiung University of Science and Technology'. The Student Grievance Review Committee is composed of students, teachers, and external scholars and experts. The Committee is responsible for handling complaints filed by students and relevant student self-governing organizations.

Grievance Channel for Faculty and Staff

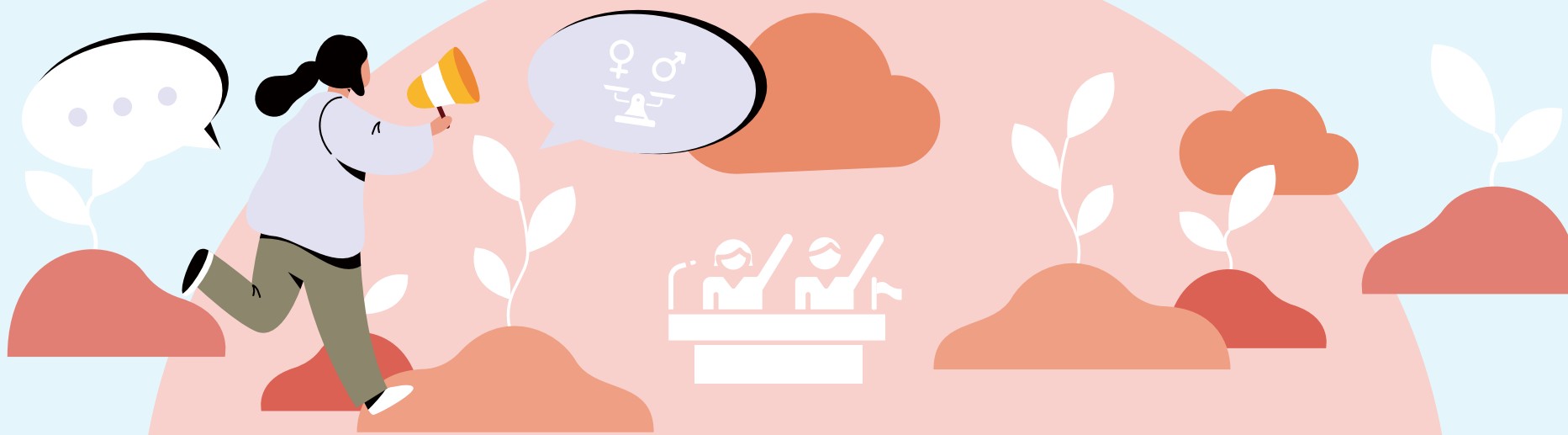
1. **Teacher Grievance System:** If a teacher believes that NKUST's actions towards them are illegal or inappropriate, and that these actions have harmed their rights, they may file a grievance with the Teacher Grievance Review Committee. This committee is composed of representatives from various colleges within the university and external members with legal expertise, ensuring to protect the basic rights of teachers. Relevant regulations can be referred to in the 'Organization and Review Guidelines for the Teacher Grievance Review Committee of National Kaohsiung University of Science and Technology'.
2. **Staff Grievance System:** Civil servants, school-based personnel, technical staff, and security guards who believe that NKUST's measures or actions are illegal or inappropriate, or whose applications have not been processed within the statutory time limit, affecting their rights, may file a grievance with the Staff Grievance Review Committee in accordance with the 'Regulations Governing the Organization and Review of the Staff Grievance Review Committee of National Kaohsiung University of Science and Technology'.

Gender Equality Appeals

Parties involved in workplace sexual harassment complaint cases may seek remedies in accordance with the following provisions:

- For sexual harassment complaints governed by the Act of Gender Equality in Employment, if a party disagrees with NKUST's investigation or disciplinary decision, they may seek remedies in the following ways:
 - (1) Those who are teachers, civil servants or military personnel may file for relief under the relevant personnel regulations.
 - (2) Those who do not fall into the above categories may file a complaint directly with the local competent authority where the complainant provides their labor services.
- For sexual harassment complaints governed by the Sexual Harassment Prevention Act, if a party disagrees with the decision of the local competent authority based on its investigation, they may file an administrative appeal in accordance with the law.

For student gender equality cases, NKUST establishes an Appeal Review Panel to deliberate on such cases after they arise and first confirms whether the appellant has filed the appeal within the prescribed time limit. The composition of the Appeal Review Panel must satisfy the statutory requirements for professional expertise in campus sexual assault or sexual harassment investigations and gender representation. Members of the original Gender Equality Committee and the original investigation panel may not serve on the Appeal Review Panel. Within 30 days, the Appeal Review Panel issues a reasoned decision and notifies the appellant of the result in writing.



Gender Equality Issue Activities, Mainstreaming Lectures, and Routine Advocacy

The Personnel Office has created a Gender Equality section on its [website](#), where NKUST posts gender equality related regulations, information on sexual harassment complaint procedures and materials promoting gender-friendly workplaces. Related activities include the following:

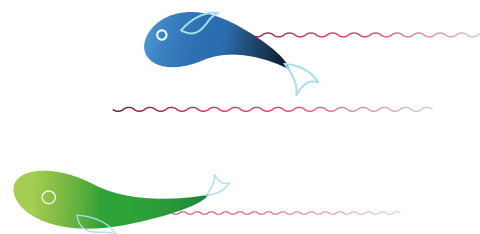
Scope	Activity Title/Content Description	Venue	Speaker/Target Audience
Routine Promotion	Establishment of the Gender Equality section Remark: Presentation of gender equality regulations, complaint procedures and materials on friendly workplaces	University website	All faculty and staff
	Digital course on key points of sexual harassment prevention Remark: Self-paced digital learning	Online civil service e-learning platform	All faculty and staff
	Gender equality section courses Remark: Elective courses	Online civil service e-learning platform	All faculty and staff
	Gender equality promotion works at the University-level Administrative Meeting Remark: Implemented at the 11th Administrative Meeting in the 2023-2024 academic year	Administrative Meeting	Delivered by the Director of Personnel, with participation by senior administrators
Education and Training	Introduction to the latest amendments to the three gender equality acts Remark: In-person lecture	First Campus	Assistant Professor Hsu, Chen-Yu, Shu-Te University
	The three gender equality acts and case sharing Remark: In-person lecture	Jiangong Campus	Attorney Yang, I-Chan
Mainstreaming Lectures	Campus gender mainstreaming lectures Remark: Sharing based on gender statistics related to campus policies, facility budgets and other topics	Each campus	NKUST faculty and staff
Gender Culture Promotion	Women's film festival and gender issue film festival Remark: Exploring topics such as gender diversity, love, marriage, equal rights and aesthetics	Organized annually	Panel discussions on imagery and gender
Teaching Promotion	Gender general education and micro-credit gender courses Remark: Expanding the depth and breadth of gender equality education	Ongoing	Student



Keynote Speaker: Assistant Professor Hsu, Chen-Yu, Department of Social Work, Shu-Te University



Keynote Speaker: Attorney Yang, I-Chan



Other routine advocacy activities are listed below:

1	Conduct gender equality and sexual harassment awareness campaigns during the freshman orientation ceremony each semester.
2	During the student onshore internship orientation sessions organized by each de-department, the importance of gender equality was emphasized.
3	Incorporate gender equality education advocacy during club leader training.
4	Gender equality education promotion was conducted during the department's weekly meeting.
5	Conduct gender equality education and advocacy for dormitory leaders and residents.
6	Promote gender equality awareness during the administrative unit's briefing session for the entire student body regarding internships.
7	An Administrative and Academic Leadership Consensus Camp is held each academic year, during which sustainability is promoted.

Job Dispute Resolution

Under the guidance of the Occupational Safety and Health Act promulgated by the Ministry of Labor, universities and colleges have established relevant regulations. NKUST has established the 'Preventive Plan for Preventing Unlawful Incidents in the Performance of Duties at National Kaohsiung University of Science and Technology', to provide protection for workers within the campus. Employees who experience unlawful harm in the workplace, resulting in physical or mental injury, caused by supervisors, colleagues, clients, or other third parties while performing their duties, may report the incident. Upon receiving the report, NKUST will handle the matter according to established procedures. If necessary, we will engage relevant professionals for assistance. NKUST also conducts regular surveys on administrative service satisfaction. These surveys are conducted online using questionnaires to gather feedback and facilitate two-way communication with all faculty, staff, and employees. The survey results are provided to each administrative unit as a reference for feedback and improvement.

∴ Overall Administrative Service Satisfaction in the Past 3 Years

(out of 5)

Target	2022	2023	2024
Teacher	★★★★★	★★★★★	★★★★★
Staff	★★★★★	★★★★★	★★★★★
Student	★★★★★	★★★★★	★★★★★
Average	★★★★★	★★★★★	★★★★★

2.5

2.5.1

Staff Grievance

Grievance Mechanisms

Following the principle that rights come with remedies, the university has established a teacher grievance system, enabling teachers to submit a written complaint within thirty days of becoming aware of any university measures they believe to be illegal or improper, and which have harmed their rights and interests. The Teacher Grievance Review Committee is composed of representatives from each college and external legal and members of the public known for their fairness. The Committee will make a decision within three months to protect the rights of teachers.



General Grievances

If faculty and staff believe that management measures or work conditions are illegal or improper and have negatively impacted their rights and interests, they may file a grievance with the 'Staff Grievance Review Committee', in accordance with the 'Organization and Review Guidelines for the Teacher's Grievance Review Committee of National Kaohsiung University of Science and Technology'.



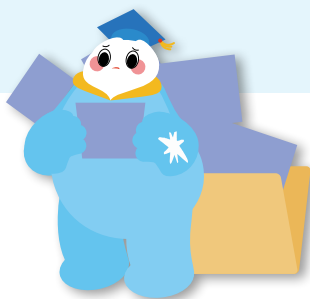
Sexual Harassment Grievance

Faculty and staff of NKUST (including non-regular employees) who experience sexual harassment may file a complaint in accordance with the 'National Kaohsiung University of Science and Technology Faculty and Staff Sexual Harassment Prevention Measures Grievance and Disciplinary Action Procedures'.



Staff Grievance System

For civil servants (including specialized technical personnel), School Fund employees, technical workers, general workers and campus security personnel who consider the University's management measures or decisions regarding working conditions to be illegal or inappropriate and detrimental to their rights, NKUST has established the "Regulations Governing the Organization and Review of the Staff Grievance Review Committee of National Kaohsiung University of Science and Technology," under which employees may file grievances with the Staff Grievance Review Committee.



2.5.2

Student Grievance

To safeguard the learning and living rights and interests of students, the Student Grievance Procedures at the National Kaohsiung University of Science and Technology have been established. Following this procedure, the 'Student Grievance Review Committee' was formed. The committee is responsible for handling complaints filed by students, student associations, and other relevant student self-governing organizations. If NKUST students, the Student Association or other student self-governance organizations believe that disciplinary actions, other measures or resolutions imposed by the University are illegal or inappropriate and have harmed their rights or interests, they may file a grievance with the Student Grievance Review Committee in accordance with the Procedures. As a general principle, students, the Student Association and other student self-governance organizations may file only one grievance with the University regarding the same case.

⚖ Appeals for Student Gender Equality Cases

For student gender equality cases, NKUST establishes an Appeal Review Panel to deliberate on such cases after they arise and first confirms whether the appellant has filed the appeal within the prescribed time limit. The composition of the Appeal Review Panel must satisfy the statutory requirements for professional expertise in campus sexual assault or sexual harassment investigations and gender representation. Members of the original Gender Equality Committee and the original investigation panel may not serve on the Appeal Review Panel. Within 30 days, the Appeal Review Panel issues a reasoned decision and notifies the appellant of the result in writing.

The student grievance system focuses primarily on providing remedies when student rights have been infringed. Other requests, petitions, suggestions or reports may be raised through the channels as class meetings, meetings of student leaders, advisor-led activities or "Meet the President" sessions and the Campus Feedback System.

2.5.3

Bullying Issues

Recognizing the severe psychological and physical impact of campus bullying on both victims and bystanders, NKUST has established the 'Implementation Measures for Preventing Campus Bullying'. The University also implements these Directions in accordance with the Ministry of Education's Regulations Governing Prevention and Control of Bullying on Campuses as amended. Additionally, the university has established a Campus Bullying Prevention Zone on the homepage of its website, providing resources for campus bullying-related education and a channel for addressing campus bullying issues on campus. Through these measures, the university aims to promote a friendly campus environment. In addition, the Personnel Office incorporates provisions on the prohibition of unlawful conduct in the workplace into the work rules and employment contracts, assists in the reassignment of duties for employees who have experienced unlawful infringement at work, and, based on the needs of affected employees, provides free psychological counseling and other employee assistance programs.



Campus Bullying
Prevention
Section

Duties of the Campus Bullying Prevention Committee

- Responsible for formulating and promoting campus bullying prevention plans.
- Responsible for mediation, investigation, deliberation, counseling, and other relevant matters related to campus bullying cases.
- **Convener:** Serves as chairperson, responsible for convening and presiding over meetings. If the chairperson is unable to convene or preside over a meeting for any reason, one committee member may be designated to act as chair.
- **Review Panel:** Reviews bullying reports and examines the reported information to determine whether relevant requirements are met. Upon unanimous agreement of all members of the Review Panel, a decision is made as to whether to accept the case. Where necessary, the Panel may ex officio notify the parties concerned, the complainant, or other relevant persons to attend and provide explanations or state their opinions.
- **Handling (Investigation) Panel:** Within five working days from the date on which the Review Panel decides to accept a case, a Handling Panel shall be formed to carry out mediation or investigation.

Process for Addressing Campus Bullying Incidents

- Applicants or complainants may file a bullying report in writing, by electronic document, or by telephone.
- Upon receipt of a report, the school shall first determine whether it is the investigating school and shall initiate care and counseling measures for the students. If a non-investigating school receives a report and becomes aware of a suspected campus bullying incident, in addition to making a report in accordance with Article 17, it shall transfer the case to the investigating school within three working days and notify the parties concerned.
- After receiving a report, the Campus Bullying Prevention Committee's Review Panel (composed of three members) shall review the reported information and deliberate on whether the case meets the definition of bullying, and shall, within 20 working days from the date of receipt of the report, notify the complainant in writing as to whether the case is accepted. If the complainant cannot be contacted, such notification is not required. A written notice of non-acceptance shall state the reasons.
- Once a case is accepted, the Campus Bullying Prevention Committee shall establish a three-member Handling (Investigation) Panel. If mediation has not been successfully concluded within one month from the date on which the Handling Panel convenes its first mediation meeting, the Panel shall discontinue mediation and instead proceed with investigation procedures (Cases involving teacher-to-student bullying may not be mediated and shall directly enter the investigation process).
- The Investigation Panel shall complete its investigation within two months. Where necessary, the investigation may be extended twice, for up to one month on each occasion. Upon completion of the investigation, the Panel shall submit a report on the investigation process and its conclusions, together with handling recommendations, to the Campus Bullying Prevention Committee.
- The Campus Bullying Prevention Committee shall notify the applicant and the perpetrator in writing of the handling (decision) results, provide the investigation report for the parties' review, and inform them of the time limit and competent authority for filing an objection (appeal) if they disagree with the decision.
- If the complainant disagrees with the handling (decision) result, he or she may, within 30 days from the day following receipt of the official letter on the decision result, submit a written petition to the competent authority of the school (the Ministry of Education). Only one petition may be filed for the same incident.
- If the perpetrator (student) disagrees with the handling (decision) result, he or she may, within 30 days from the day following receipt of the official letter on the decision result, file a written appeal to the Student Appeal Review Committee of NKUST. Only one appeal may be filed for the same incident.

Prevention and Advocacy Activities

To promote awareness of the issues related to preventing campus bullying, our school continues to conduct anti-bullying advocacy and educational activities, as well as organize special lectures and workshops, to enhance the knowledge and capabilities of our entire school's faculty and students in preventing campus bullying. The various campus bullying prevention promotion activities are summarized as follows:

- Conduct campus bullying prevention awareness campaigns during the annual freshman orientation ceremony.
- Each department holds student internship briefing sessions to promote awareness of the relevant regulations for preventing campus bullying.
- During the training for club leaders, incorporate education and advocacy for preventing campus bullying.
- Conduct campus bullying prevention education advocacy during the departmental weekly meetings.
- Conduct campus bullying prevention education and advocacy for dormitory administrators and residents.
- A Campus Bullying Prevention section has been created on the University's official website to provide promotional materials, relevant regulations, application forms, and the latest information. In addition, in line with the Ministry of Education's 2024 amendments to relevant regulations, NKUST has produced a short video for campus bullying prevention advocacy, made available for all teachers and students of the University to view.

2.5.4

Key Significant Events

Any key major incidents that affect the reputation of NKUST and have been deliberated and finalized through the University's meeting procedures, including those arising through complaint mechanisms or other procedures, and that result in potential or actual adverse impacts of NKUST on engaged stakeholders, are handled through the relevant governance mechanisms. In addition, the Office of the Secretariat's Administrative Affairs Division coordinates the handling and response to petitions and reform school proposals. In cases involving legal matters, the Office of the Secretariat's Legal and Audit Division provides legal consultation assistance. In 2024, there were no major violations of law in which the University was the primary responsible party.

∴ The statistical summary of significant key events in the past three years

Unit: case

Scope	2024	2023	2022
Faculty Grievance Cases	2	1	2
Student Grievance Cases	16	17	22
Gender Equality Cases	17	18	1
Procurement Dispute Cases	0	2	2
Faculty Academic Ethics Cases	1	5	0
Student Academic Integrity Cases	1	3	1
Administrative, Civil, and Criminal Litigation Cases	9	1	1
Bullying Cases	5	0	0
Total	51	47	29



2.6

Campus safety

Schools are considered to be crucial institutions in shaping future generations and are also among the safest and most trusted places in society. As times and values change, the challenges facing the campus are increasing. From traditional management practices to the increasingly complex and diverse safety challenges of today, we have developed four key strategies for campus safety maintenance based on the Ministry of Education's policies: proactive prevention, emergency response, external support, and intervention through counseling. These strategies aim to ensure that every student can learn and grow in a safe environment.

Strategies For Campus Safety Maintenance



Preventive Measures

In accordance with the Ministry of Education regulations, including the 'Guidelines for Maintaining Campus Safety Implementation', 'Campus Safety Precautions', and 'Campus Safety and Disaster Incident Reporting Guidelines', a campus safety audit is conducted to establish a campus safety map. Investigations and reports are conducted based on these guidelines to ensure the effective implementation of safety measures.



Emergency Response

In accordance with relevant regulations and procedures from the Ministry of Education, such as the 'Campus Safety and Disaster Incident Reporting Guidelines', 'Flowchart for Handling Major Emergency Campus Safety Incidents in Schools at All Levels', and 'Standard Operating Procedures for Handling Explosive Incidents on College and University Campuses', this plan establishes a 'Campus Safety and Disaster Prevention Plan' that aligns with the actual conditions of NKUST. This plan aims to safeguard the safety of faculty and students, prevent potential disasters, and ensure a rapid and effective response and reporting system to maintain campus security.



External Support

A support agreement was signed with the Police Precinct, and a communication platform was established with multiple units to coordinate campus safety and security efforts.



Intervention through Counseling

Provide counseling services to students experiencing psychological and physical trauma, including individual counseling and referral to professional treatment, to ensure that students receive comprehensive support.

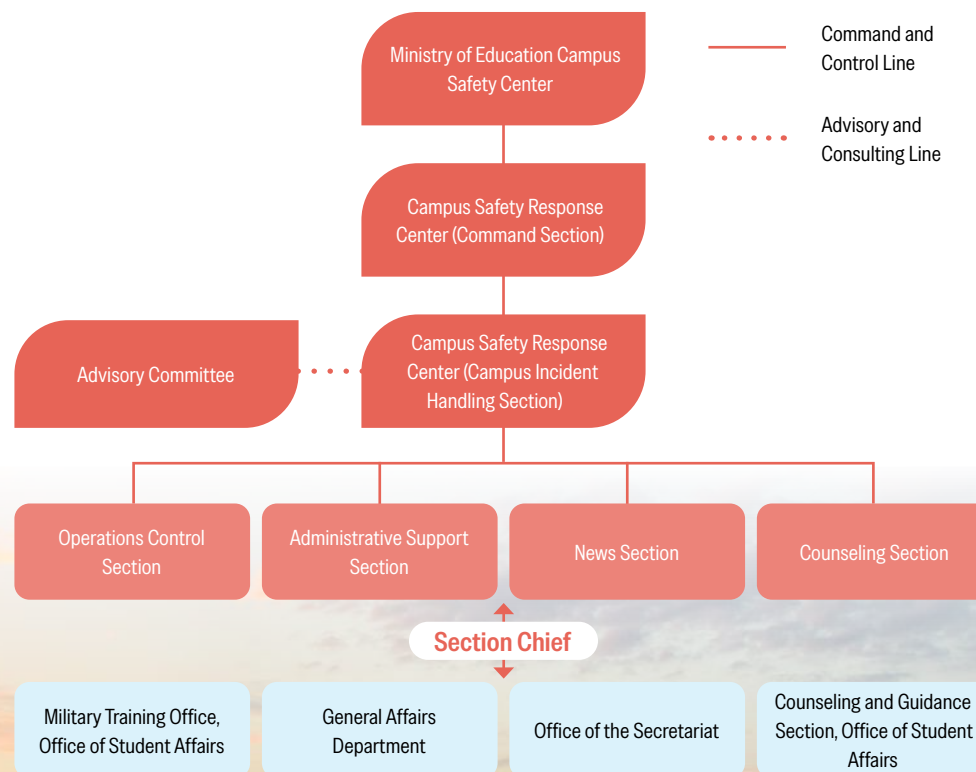
Campus Security Management and Disaster Prevention and Rescue Mechanism

In order to ensure a high-quality learning environment for students and enable them to focus on their studies without external disturbances, our school aims to achieve safety goals related to personal, operational, environmental, and asset safety. We are committed to effectively preventing special incidents and accidents through notification, prevention, and appropriate handling, ensuring the efficient operation of campus security mechanisms. Additionally, we collaborate with educational, law enforcement, and social resources to establish a Campus Disaster Management Mechanism. This plan is designed to safeguard the safety of our faculty, staff, students, teaching facilities, buildings, and vessels, as well as to uphold the reputation of our school. We carry out disaster reduction, preparedness, response, and recovery efforts to effectively minimize campus disasters, strengthen campus security mechanisms, and ensure the safety of our teachers and students. To ensure the safety of campus life and property, as well as the well-being of faculty, staff, and students, the "NKUST Campus Security Management and Disaster Prevention and Rescue Implementation Plan" has therefore been established. To properly organize internal manpower, establish a campus safety, disaster management, and incident reporting mechanism, achieve rapid emergency response and recovery capabilities, effectively reduce campus losses, and ensure the safety of faculty, staff, and students, NKUST has established the Campus Safety Response Center (the "Campus Safety Center"). The Center clearly defines campus safety responsibilities for each unit, thereby strengthening overall campus safety functions. The organizational structure is shown below.



Campus Safety
Management and
Disaster Prevention
and Response
Implementation Plan

∴ The organizational structure of our Campus Safety Center



2.7

Occupational Safety and Health Management

In accordance with the regulations of the Ministry of Health and Welfare and the Ministry of Education, NKUST actively implements a smoke-free campus policy. In addition, to prevent occupational hazards and safeguard the safety and health of faculty and staff, NKUST has formulated, planned, and implemented the Occupational Safety and Health Management Plan. It delineates responsibilities for each unit and implements various occupational safety and health projects within specified timeframes. The Environmental Protection, Safety and Health Center and the Health Services Section of the Office of Student Affairs are dedicated to health promotion and maintaining a smoke-free campus environment, the school has established comprehensive safety and health-related systems. Details are as follows:

2.7.1

Occupational Safety

In accordance with the 'Occupational Safety and Health Management Plan', various management measures are implemented. The Environmental Protection and Occupational Health and Safety Committee regularly reviews and revises plans for environmental protection, occupational safety and health, radiation protection, fire safety, and other related measures. The Committee also provides recommendations on environmental, safety, and health policies to enhance campus environmental quality and effectively manage occupational safety and health matters on campus. All newly hired faculty and staff are required to complete a 3-hour safety and health training program with a focus on sustainability. This training will be uniformly planned and conducted by the Environmental, Occupational Safety and Health Center. In addition, based on the characteristics of the location (such as the use of hazardous chemicals), an additional 3 hours of safety and health training will be added. The training content will be planned and conducted by each unit. The statistical summary of occupational incidents in the past three years is as follows:



Occupational
Safety and Health
Management Plan

∴ The statistical summary of occupational incidents in the past three years

Item	2024	2023	2022
Number of Temporary Total Disability Cases, Excluding Accidents Occurring During Commuting to and from Work	0	0	0
Number of work-related ill health cases	0	0	0
Total annual hours worked	6,586,096 hours	6,821,424 hours	7,025,165 hours
The frequency rate (FR) of disability injuries per million working hours	0	0	0
The severity rate (SR) of disability injuries per million working hours	0	0	0
The occupational disease rate (ODR)	0	0	0

2.7.2

Health Promotion

Regular Health Examinations for Workers

In accordance with the Regulations for Labor Health Protection, NKUST compiles a list of in-service workers who meet the criteria for general (special) health examinations in that year, identifies medical institutions recognized by the Ministry of Labor to conduct such examinations, coordinates schedules and confirms examination items, and notifies in-service workers who are required to undergo health examinations.

Based on the returned health examination reports, NKUST conducts analysis and assessment, classifies and manages abnormal health conditions, and, where necessary, arranges on-site health services by the University's contracted occupational medicine specialists to provide improvement guidance. Occupational health nurses then continue follow-up management to ensure comprehensive health management at NKUST.

Campus Health Consultation

The Health Promotion Unit is equipped with high-quality health facilities, such as body composition analyzers, fully automated height and weight scales, blood pressure monitors, and vision testing devices for self-testing. Nurses provide relevant health consultations based on the test results. NKUST also employs full-time dietitians to offer nutrition education and healthy diet counseling services.



A variety of health assessment instruments are provided on campus to enable self-monitoring by faculty and students.

Statistics of Contracted Medical Institutions

In order to provide convenient medical services and healthcare consultations for the faculty, staff, and students of our university, we have signed contracts with nearby medical institutions. These contracts cover various departments, including internal medicine, surgery, obstetrics and gynecology, family medicine, otolaryngology, ophthalmology, dentistry, psychiatry medicine, and traditional Chinese medicine. In total, there are 33 medical institutions (2 hospitals and 31 clinics), ensuring comprehensive health benefits for all faculty, staff, and students.

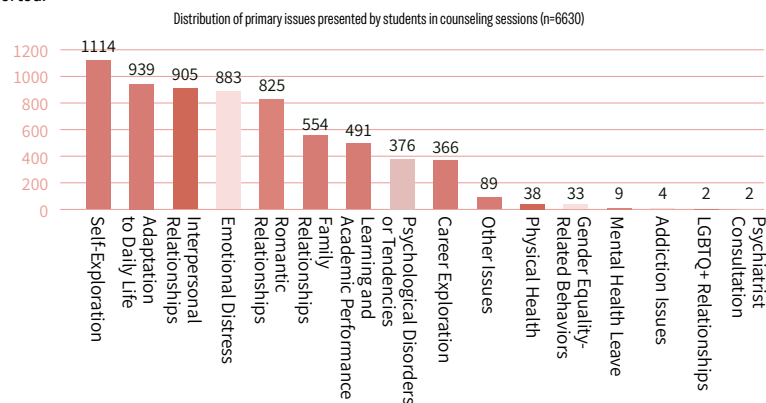


Contracted Medical
Institutions

Campus Psychological Counseling and Guidance Services

In the realm of psychological counseling, apart from establishing an appointment system, NKUST has obtained approval from the appropriate authority to conduct online counseling, enabling students to access relevant resources at any time. Psychological counseling and interview services for students are provided by dedicated or part-time counseling staff at each campus, and students make appointments via the counseling appointment system according to their academic department and campus. For students who cannot attend in-person counseling for special reasons, NKUST also provides tele-counseling services. In 2024, the number of students receiving counseling services across the Day Division, Division of Continuing and Extension Education, and Continuing Education College (including four-year technical programs, two-year technical programs, five-year technical programs, and master's and doctoral programs) totaled 1,554 individuals. The number of counseling sessions per student varied based on individual needs, with an aggregate of 6,630 counseling sessions. According to the 2024 technical and vocational education database, the total student enrollment at NKUST was 27,419 as of October 15, 2024. The percentage of students who received counseling services during the year was 5.7%. Compared with the previous year's number of students receiving counseling (1,486 students), both the number and proportion show a slight increase. Possible reasons include not only an increase in students' psychological distress, but also a greater awareness among students of maintaining mental health, stronger willingness for self-care, and more proactive use of counseling resources, leading to an increase in counseling utilization.

Statistics on the primary issues presented by students in counseling sessions in 2024 are as follows, based on the main concerns reported:



Positive Psychology Counseling

NKUST actively promotes positive counseling on campus and has built a caring and supportive counseling system through the following initiatives, providing students with greater support and resources to foster their mental health and holistic development.

Animal-assisted Therapy

In addition to organizing animal-assisted therapy activities in workshop format, NKUST also collaborates with the Center for Liberal Arts Education to offer a micro-credit life education course titled "Understanding Self-Emotions through Animal-Assisted Therapy". A total of 131 participants attended the two sessions, with an overall satisfaction rate of 97%. The diverse learning experiences and feedback from most participants indicate that students highly appreciated and actively engaged in the course.



"What These Dogs Taught Me" - Special
Lecture on Animal-Assisted Therapy

Aroma Therapy

Integrating counseling services with aromatherapy provides a more holistic mind-body-spirit healing experience. In 2024, in addition to continuing to incorporate aroma therapy into counseling sessions and offering essential oils to students as needed according to their emotional and stress-related needs, NKUST also organized "Journey of the Soul with Scents" and "Drifting on the Sea of Fragrance: Aroma Therapy Stress-Relief Lecture". These activities were promoted through the student club fair and student lectures to broaden students' exposure to aroma-based counseling experiences. Students were able to personally experience the healing effects and learn self-care methods for stress relief in their academic and daily lives. A total of 270 participants attended the two events, with an overall satisfaction rate of 97.5%.



Club Carnival at the First Campus -
Journey of the Soul with Scents

Collaborate with the Center for the Liberal Arts to Promote Micro-Credits in Life Education

General education courses related to life education themes encourage learning through interaction and dialogue, guiding faculty and students to explore the meaning of life and to deepen their positive self-values. In 2024, four such sessions were held, with a total of 47 student participants and an activity satisfaction rate of 93.5%.



Micro-Credit Course: "Living a Life Where
You Are Not the Only One Who Decides"

Implementing Campus Mental Health Promotion Program

Ministry of Education's Campus Mental Health Promotion

NKUST continues to implement the Ministry of Education's Campus Mental Health Promotion Program to enhance campus mental health and support students' individual development. The Program covers four main areas - Mental Health Themed Activities: Topics include emotion regulation, interpersonal relationships, romantic relationships, time management, and popular themes such as MBTI and color analysis. A total of 43 sessions were held, with 2,609 participants.

On-campus psychiatric consultation services

NKUST engaged five psychiatrists to provide medical support to 70 students, with a total of 80 hours of service. Additionally, 29 students were referred to off-campus medical services based on physicians' assessments.

Mental Health Gatekeepers

Fostering empathy, self-care, and stress management. A total of 26 sessions were held, with 5,114 participants, and an overall satisfaction rate of 95%. At the beginning of the 2024 semester, 5,290 text messages on suicide prevention were sent to parents of first-year students, providing relevant health education information.

Enhancing the professional competencies of relevant personnel

1. Capacity-building activities for all faculty members (including advisors and thesis supervisors): 8 sessions, with 672 participants.
2. Capacity-building activities for counseling staff: 7 sessions, with 132 participants.
3. Capacity-building activities for staff of teaching and administrative units: 2 sessions, with 220 participants.

Monthly Counseling Newsletter and Podcast

The Counseling Group within the Office of Student Affairs offers monthly counseling newsletters to assist readers in understanding mental health issues and their solutions, thereby promoting growth and development. In response to the growth of multimedia and audio-visual formats, NKUST launched a podcast in 2024, enabling more people to listen on demand. As of now, the podcast has accumulated a total of 3,356 listens.

Support and Counseling for Students Who Take Psychological Leave

Beginning in the 2024 semester, the Counseling and Guidance Section has implemented follow-up care and counseling for students who take three or more days of psychological leave. In the first semester of 2024, 55 students were provided with follow-up counseling. A total of 68 check-ins were conducted via telephone and text message, and 22 of these students received in-depth psychological counseling sessions.

Support and Counseling for Extended Students

Since 2023, the Counseling and Guidance Section of the Office of Student Affairs has also implemented care and counseling for extended study students, providing ongoing support each semester for their campus life. In addition to sending periodic care messages and emails containing counseling appointment information and self-administered mood assessments, NKUST provided a total of 216 counseling sessions in 2024 specifically for extended study students.

The Health and Hygiene Section Group conducts a variety of health promotion activities

Under the "Health Action" theme, NKUST organizes activities on healthy body weight, tobacco hazards, HIV and infectious disease prevention, first aid education, and nutrition education. In addition, student volunteers assist in filming tobacco hazard prevention videos on campus. Using AI software, short videos aligned with monthly themes are produced and released on social media platforms, providing innovative approaches to health promotion.



Remove Tobacco and Plant Food



Activities during Gender Equality Awareness Week - "HIV Prevention Monopoly"



Online promotion - health promotion short videos



First aid education - CPR and AED drills



Health-themed promotional lectures



Student club carnival events
Department of Health HIV anonymous testing

Statistics on the Number of Health-Themed Activities and Participants

Event Topics	Session	Number of Participants	Reach of Social Media Outreach
Healthy Weight	14	1,776	26,275
Sex Education and HIV/AIDS Prevention	16	1,428	18,953
Tobacco Control	57	6,658	19,040
First Aid Education and Accident Injury Prevention	21	1,156	11,383
Infectious Disease Prevention	33	5,630	20,105

2.7.3

Food Safety

Sustainable Food and Beverage and the Proportion of Vegetarian Restaurants

NKUST's on-campus catering services are outsourced to external vendors. The vendors use locally sourced ingredients from Taiwan, including fruits, vegetables, and meat products. To reduce food waste, consumers can select food as needed, fostering a habit of food conservation. There are eight food vendors on campus, all of which offer vegetarian or vegan meal options, helping to reduce carbon emissions associated with livestock farming. These locations include the self-service cafeteria, Food Court, male and female dormitory cafeterias, Food Court at the Nanzih Campus, Yanchao Campus Restaurant, Cijin Campus Restaurant, and Jiangong Campus Restaurant.

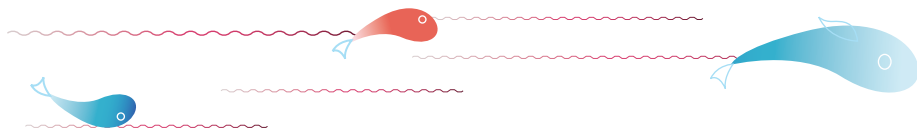
∴ Sustainable Restaurant Statistics for the Past 3 Years

Unit: restaurants.

Years	Total Number of Restaurants	Number of Restaurants Prohibiting Disposable Tableware and Limiting the Use of Single-Use Plastic Straws	Number of Restaurants Offering Vegetarian Options
2024	8	8	8
2023	9	9	8
2022	10	10	8

Plastic Reduction Policy

NKUST's outsourced food service and leasing contracts include clauses on plastic reduction. For dine-in customers, vendors are required not to use plastic or polystyrene tableware, including cups, bowls, plates, dishes, food containers, and plastic inner trays. However, disposable chopsticks and spoons used for take-out are not subject to this restriction. Any policy changes will be implemented in accordance with government regulations. NKUST complies with relevant government regulations that prohibit the provision of single-use plastic bags or straws for dine-in customers. In the event of improper use, the vendor shall be liable for a fine of NT\$1,200 to NT\$6,000 in accordance with Article 51 of the Waste Disposal Act.



Food Safety Management

To ensure food safety management, the Health and Hygiene Section Group of the Office of Student Affairs is responsible for supervising hygiene inspections of all vendors in the restaurants and Food Court. Inspections are conducted at least once a week, and restaurant operators are required to cooperate with the inspections. If any violations of the Food Hygiene Standards are found, vendors are required to make improvements within a specified timeframe. All inspection results are documented and archived for future reference. To create a safe and healthy school food environment, this school is cooperating with the Ministry of Education's Campus Food Ingredient Registration Platform. All food vendors are required to register food-related information on the School Food Registration Platform during their business hours. On-campus food services are operated by outsourced vendors, who engage professional contractors to handle food waste. The processed food waste data reports are submitted to the Environmental Protection, Safety and Health Center for tracking and management.



Ministry of
Education's Campus
Food Ingredient
Registration Platform

Quality Testing for Drinking Water

NKUST has installed water dispensers on campus for the use of faculty, students, and visitors. In order to prevent waterborne diseases, the school follows regulations such as the 'Regulations for the Use and Maintenance of Continuous Water Supply Equipment for Drinking Water' and commissions external professional vendors to conduct quarterly inspections of the water dispensers, ensuring that the drinking water on campus meets water quality standards. If any dispenser is found to have unacceptable levels of Escherichia coli, the maintenance vendor will be requested to strengthen maintenance and improvement. Relevant water quality testing data can be found on the website of our school's [environmental health and safety center](#). All testing reports comply with regulatory requirements.



The school commissioned a professional
company to conduct water quality testing of
the water dispensers



Water Quality Test
Data

2.8

Information Security

To strengthen information security management and ensure the confidentiality, integrity, and availability of information and assets, NKUST has established Guidelines for Information Security and Personal Data Protection in accordance with relevant regulations. NKUST was certified under ISO 27001:2013 from 2018 to 2023 and obtained ISO 27001:2022 certification in 2024. To ensure effective management, the Information Security and Personal Data Protection Management Committee has been established. The Committee conducts annual meetings to review policies, conduct information security system and asset inventories. Through regular vulnerability scanning, security drills, training, and equipment replacement, NKUST ensures information security.

Methods for Identifying and Resolving Data Security Issues



Methods for Identifying Data Security Vulnerabilities within Information Systems

- The system is scanned using professional vulnerability scanning tools to identify potential vulnerabilities and weaknesses. These tools can detect common security issues such as outdated software, default passwords, and open ports.
- Conduct penetration testing to simulate the behavior of attackers and evaluate the system for potential vulnerabilities.
- NKUST also cooperates with education authorities to conduct social engineering drills for information security, using simulated hacking attacks to identify system vulnerabilities.
- Regular security reviews should be conducted on information systems, applications, and networks to identify potential security risks.
- Analyzing event logs of systems and applications to detect abnormal activities or potential security threats.
- Implement a continuous monitoring mechanism to detect potential threats and vulnerabilities at all times, including real-time monitoring of firewalls, intrusion detection systems (IDS), intrusion prevention systems (IPS), etc.



Methods for resolving identified data security risks and vulnerabilities

- Based on the results of vulnerability scanning, penetration testing, and other assessments, a timely remediation plan should be developed and implemented to ensure that known vulnerabilities are addressed and attacks are prevented.
- Limit manager permissions, granting users the minimum permissions they need to prevent unauthorized access and data breaches.
- Enhance encryption for sensitive data to safeguard it from unauthorized access and misuse during transmission and storage.
- Develop and implement information security standards and policies, ensuring consistent compliance with security measures throughout the organization.
- Provide regular information security training to enhance security awareness within the organization and reduce the risks caused by human errors.
- Develop and implement an information security incident response plan to rapidly address security incidents. Conduct regular safety drills to test the effectiveness of the response plan.

To enhance data security and identify attack methods, in addition to the controlling method of system monitoring, NKUST also conducts the following training programs. These programs will help faculty and staff become more aware of new attack methods and take appropriate preventive measures:



Social Engineering Attacks

Attackers deceive victims into providing sensitive personal information, such as account passwords or payment details, through means such as phishing emails and disguised websites.



IoT Attacks

Attackers exploit security vulnerabilities in IoT devices to gain access to sensitive information, monitor device activity, or control devices for malicious activities, causing damage to infrastructure.

ISO/IEC 27001 provides a network attack management system to address the multifaceted challenges of information security, including the following specific measures:



Regular risk assessments and vulnerability scanning should be conducted to promptly patch security vulnerabilities in the system.



Develop a network attack response plan, including backup and recovery strategies, to swiftly address security incidents.



Provide education and training to enhance faculty and staff awareness of network security, particularly regarding social engineering and phishing attacks.



Regular vulnerability scanning and security reviews are conducted to identify and address potential security vulnerabilities in systems and devices.



Deploy network management software to enable real-time monitoring, allowing for prompt detection and defense against potential intrusions.



Implement secure network and system configurations, including disabling unnecessary services and ensuring device settings are secure.



Establish an effective monitoring and logging management mechanism to track and detect abnormal behavior in network activity.



Information Lifecycle

The data collection lifecycle process includes the collection, processing, utilization, preservation, and destruction of data, aiming to safeguard student information and ensure compliance with legal regulations. The life cycle of student data must comply with Taiwan's Personal Data Protection Act and international privacy standards (such as ISO 29100 and BS10012) to ensure legality, transparency, and privacy protection. The key implementation points at each stage are as follows:



Chapter Highlights

- 2024 Network Equipment Replacement Rates: It reached **8%** at Jiangong/Yanchao campuses, **20%** at First Campus, and **13%** at Nanzih/Cijin campuses, exceeding the expected completion rates.
- The proportion of full-time staff and supervisors who completed information security training courses reached **64%**.
- The number of information leaks was **zero**, with a percentage of personal data leakage also at **0%**. The number of students affected by data leaks was also zero.
- There have been **0** complaints confirmed by the university from external sources regarding privacy infringement.
- There were **zero** cases of complaints regarding privacy infringement from the Ministry of Education.
- There have been **zero** confirmed incidents of information leakage, theft, or loss of student data.

Chapter 3

Innovative Talent Development



3.1 Admissions and Financial Aid	69
3.2 Sustainability Education	75
3.3 Campus Sustainability Practices	81
3.4 Sustainable Product Development	84
3.5 Academic Performance	85
3.6 Teaching Quality Assurance	93
3.7 Academic and Ethical Integrity	96
3.8 Career Counseling and Graduate Outcomes	97

3.1

Admissions and Financial Aid

3.1.1

Talent Development

Tuition and fee standards at Taiwanese institutions depend on the type of institution (public or private) and the program of study and are governed by "the Regulations Governing the Collection of Tuition and Miscellaneous Fees at Junior Colleges and Institutions of Higher Education". Students can check tuition and fee standards for each institution on the [Ministry of Education's University and College Affairs Information Disclosure Platform](#). In addition, NKUST emphasizes information transparency and has established the [Admissions Information website](#) to announce application information. Students can apply online and print payment slips themselves. University units contact students individually via email and telephone, while the online platform centrally provides admissions brochures, application procedures, key dates, and information on various admissions channels to help applicants and parents fully understand admissions-related information. Tuition and fee standards are also disclosed on the [University Affairs Information Disclosure website](#).

In 2024, the total number of students enrolled in our university was 28,069, of which 64.6% were male and 35.4% were female. Compared with the gender ratio of 78.63% male and 21.37% female in engineering, manufacturing, and construction-related departments and programs in higher education as reported by the Department of Statistics in 2023, our university has a smaller gender disparity among enrolled students.

∴ Total Number of Students (Actual Enrollment) and Gender Statistics

Unit: person

Type of Students		Number of males	Number of Women	Total
Day school	Doctoral program	411	157	568
	Master class	1,774	792	2,566
	Four-year Technical Program	10,799	6,526	17,325
	Two-year Technical Program	317	131	448
	Five-year Junior College	699	154	853
Division of Continuing Education	Four-year Technical Program	2,183	986	3,169
	Two-year Technical Program	289	220	509
	Master's Program	1,212	731	1,943
Institute of Continuing Education	Two-year Technical Program	17	8	25
Total		17,714	9,705	27,419



Statistics of the Number of Individual Applicants for Admission in the 2023/2024 Academic Year at Our School

Unit: person

Type of Education System		Number of registrants	Actual number of admitted students
Day school	Doctoral program	144	80
	Master class	3,532	1,180
Division of Continuing Education	Master's for working professionals	1,146	813
	Four-year Technical Program	1,741	705
	Two-year Technical Program	487	286
Total		7,050	3,064

Statistical Breakdown of Student Diversity

In the 2023/2024 academic year, there were a total of 281 students with special educational needs (including 18 students who were on leave of absence but required follow-up guidance). According to the Ministry of Education's statistics on disability categories, the majority of students receiving support from NKUST's resource room were students with learning disabilities (101 students), followed by students with autism (84 students).

2024 Statistical Breakdown of Student Diversity

Unit: person

Type of Students	People
Special Education (including disabilities)	281
Indigenous peoples	233
Mainland Chinese student	3
Hong Kong and Macau students	36
Overseas Chinese students	186
Foreign students	270

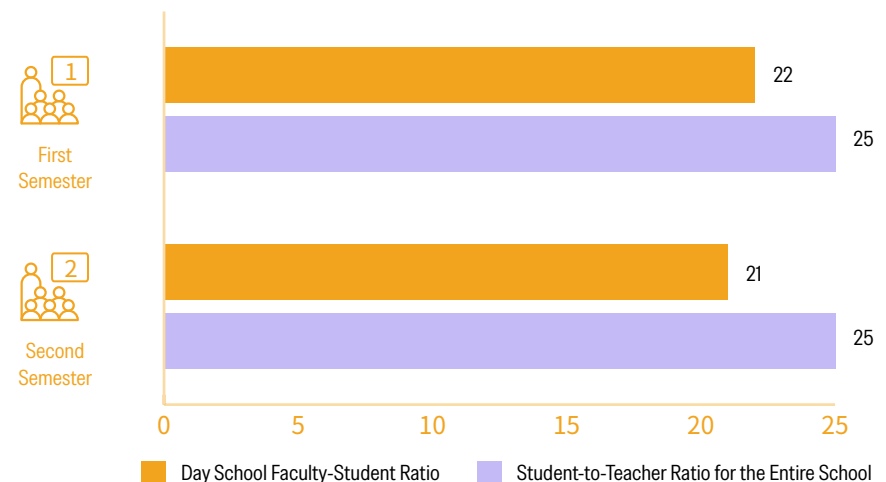
Establishing a Base for Expansion into Southeast Asian Countries

- Expand the cultivation of international student talent in alignment with the government's southbound policy and the promotion of vocational education. Actively sign dual-degree programs with sister schools in various countries to engage in extensive educational cooperation and recruit outstanding students to study at our institution.
- Actively sign dual-degree programs with sister schools to engage in extensive educational cooperation and recruit outstanding students, meeting the international workforce needs of overseas companies. Jointly offer specialized master's programs and corporate training programs with multinational companies, providing a talent cultivation base for overseas Taiwanese businesses.

Student-to-Teacher Ratio

According to the 'Criteria for the Scale of Total Volume Development and Resource Requirements', the student-to-faculty ratio at the University of Science and Technology should be below 27. This calculation is based on the total weighted student count (including the count of students in the Institute of Continuing Education) divided by the total number of full-time and part-time faculty members at the university. Additionally, the student-to-faculty ratio for the day program should be below 23, calculated by dividing the total weighted student count for the day program by the total number of full-time and part-time faculty members at the university. The results of the calculations for the 2023/2024 academic year at our school are all in compliance with the standards, as depicted in the table below:

Student-to-Teacher Ratio at Our School for the 2023/2024 Academic Year



According to the University Act and NKUST's Academic Regulations, the minimum credit requirements for graduation are: at least 220 credits for five-year programs, 128 credits for four-year programs, 72 credits for two-year programs, 30 credits for master's programs, and 24 credits for doctoral programs. The average total graduation credits are as follows:

∴ The average total credits required for graduation per student in the 2023/2024 academic year

Education System	Average total credits	Basic graduation requirements
Five-year Junior College	226	220
Two-year Technical Program (Day)	75	72
Two-year Technical Program (Continuous education)	72	-
Four-year Technical Program (Day)	129	128
Four-year Technical Program (Continuous)	129	-
Doctoral program	34	24
Master class	38	30
Master's for working professionals	37	-
Institute of Continuing Education	--	-

3.1.2

Resource Classroom Counseling

The 'Status of Counseling and Support Services for Students with Disabilities in Universities and Colleges' of NKUST was reviewed and approved by the Taiwan Assessment and Evaluation Association. The Resource Classroom is established to support students with special education needs enrolled at NKUST in adapting to university life and learning, smoothly transitioning to their post-graduation life and career development, and enjoying a friendly, accessible campus environment.

Based on each student's characteristics and needs, the Resource Classroom provides multiple resources and support in areas such as learning, daily living, career development, and assistive learning devices, which can be summarized as follows:

Case evaluation services

- 1 Formulate a draft Individualized Support Plan (ISP) through surveys and interviews, and convene meetings to integrate resources

Academic resources and support - Tutoring

- 2 Provide tutoring according to students' needs to strengthen subject-matter competence

Academic resources and support - Learning partners

- 3 Match peers to assist with in-class learning and help stabilize students' emotions

Academic resources and support - Learning equipment

- 4 Provide learning equipment and assistive devices to reduce barriers and limitations

Campus and Life Adjustment Counseling Activities

- 5 Organize activities to promote interpersonal interaction and adaptation to campus life

Learning empowerment activities and lectures

- 6 Strengthen self-management and interdisciplinary learning, and explore life skills

Career Counseling Activities

- 7 Conduct career exploration and career planning

Friendly campus promotion

- 8 Organize experiential and advocacy activities to enhance acceptance and awareness

Counseling resources linkage - Orientation for new students

- 9 Enhance parents' understanding and promote transition support

Counseling resources linkage - Graduation transition

- 10 Assist graduating students in connecting to career pathways and im-proving employability

Special Education Promotion Committee

- 11 Establish cross-unit collaboration and review special education services



Campus and Life Adaptation Support Services



Career Development and Guidance Activity



Career Guidance and Counseling Activity



Inclusive Campus Promotion and Special Education Outreach Activities



Learning Enhancement and Capacity-Building Activity

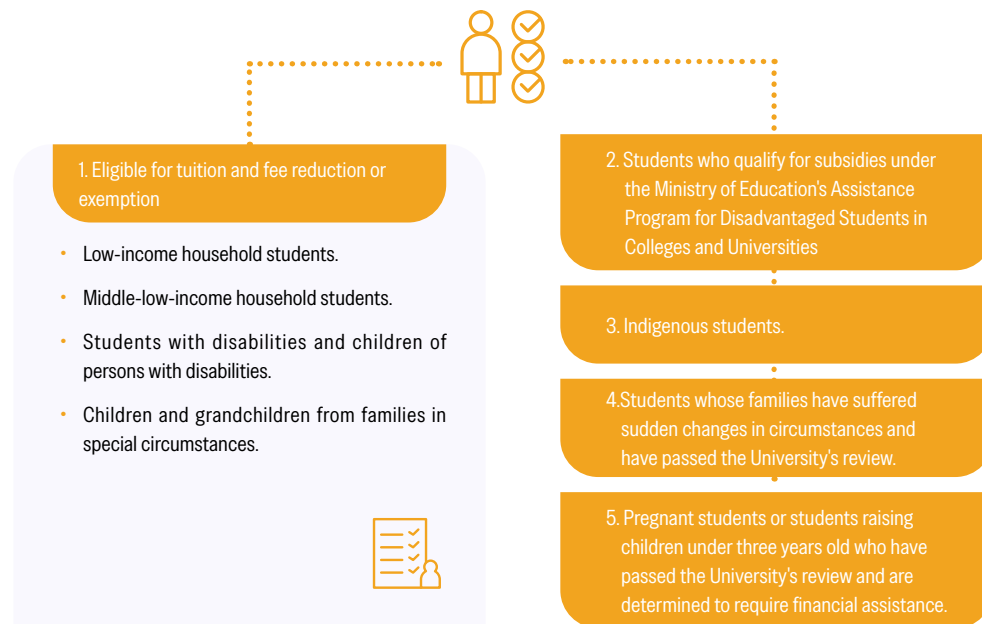


Academic Learning Resource Assistance

3.1.3

Support for Economically Disadvantaged Students

NKUST is committed to enhancing the public nature of higher education, particularly for economically disadvantaged students (NKUST implements support in accordance with the Ministry of Education's subsidy regulations and NKUST's own guidance and scholarship mechanisms for economically disadvantaged students). The target group comprises currently enrolled NKUST students. Students in the first to third years of five-year junior college programs, in-service programs, and extended study (post-graduation) students are excluded. Students who meet any of the following criteria (with priority given to those in more disadvantaged economic conditions) are eligible:



To care for economically disadvantaged students, NKUST provides multifaceted assistance, including subsidies for entrance examination fees, transportation, and accommodation expenses, with the aim of promoting social mobility. Concurrently, by intensifying enrollment promotion activities, such as visiting high schools and vocational schools in remote areas and inviting external visits, we have increased students' understanding of and interest in NKUST. This action helps students who are economically disadvantaged but with potential to access higher education, thereby promoting social mobility.

Learning Support Mechanism for Economically Disadvantaged Students

Beginning in 2024, the Ministry of Education's Higher Education SPROUT Project has actively supported economically disadvantaged students. The key features of each program are as follows:

License counseling incentive subsidies

Summary of Contents: Subsidize license examination fees to encourage students to obtain professional and language certifications and promote career development

Implementation Status: A total of **174** instances of economically disadvantaged students benefited, obtaining **121** licenses; incentive payments totaled NT\$**728,749**

Academic learning and empowerment

Summary of Contents: Provide incentives to support students' self-directed learning and professional empowerment, enhancing their academic and practical abilities

Implementation Status: Academic learning subsidies benefited **1,491** instances of economically disadvantaged students, and empowerment subsidies benefited **34** instances of economically disadvantaged students

Sustainability learning capability

Summary of Contents: Help students build resilience and self-confidence in coping with stress and enhance their problem-solving skills

Implementation Status: A total of **566** instances of economically disadvantaged students benefited; incentive payments totaled NT\$**1,032,000**



2024 Higher Education Sprout Project - Subproject D
Enhancing the Public Role of Higher Education - Soft Skills
Development Courses



Sustainability Learning Capability

∴ Number of Recipients and Amounts of Incentives Issued to Economically Disadvantaged Students

Name of the Incentive Items	Number of recipients granted	Amount Issued
Academic tutoring (academic learning)	1,491	10,437,000
Student self-directed learning projects (empowerment)	34	2,136,000
Performance-based learning incentives	778	1,330,000
Sustainability learning capability counseling	566	1,032,000
Employment counseling and matching assistance	228	337,262
License Guidance	253	728,749
Total	3,350	16,001,011

∴ The distribution of financial incentives for economically disadvantaged students over the past three years

2024		2023		2022	
Number of recipients granted	Amount Issued	Number of recipients granted	Amount Issued	Number of recipients granted	Amount Issued
3,350	16,001,011	3,568	17,657,682	4,384	20,748,615

∴ Ratio of Low-Income Students Receiving Financial Assistance from the University in the Past Three Years

2024			2023			2022		
Total number of students	Number of students receiving assistance	Ratio of students receiving assistance	Total number of students	Number of students receiving assistance	Ratio of students receiving assistance	Total number of students	Number of students receiving assistance	Ratio of students receiving assistance
27,419	772	3%	28,069	905	3%	28,443	938	3%

3.1.4

Measures to Assist Students

NKUST's Extracurricular Activities Division has established the Student Self-Governing Organization and Club Leader Service Excellence Award, aiming to recognize recent graduates who have actively participated in club activities and demonstrated a spirit of dedicated service. These awards were presented prior to the graduation ceremony, and also provided financial support to the clubs. In addition to managing student loans, tuition and fee waivers, and scholarships for disadvantaged students as mandated by government regulations, NKUST has also devised various assistance programs for students, encompassing initiatives like the Hand in Hand Scholarship Program, Love and Fulfillment Scholarship, Chunyang Scholarship, and 3Q Scholarship. These programs are supported by dedicated alumni, faculty, staff, and external donors, aiming to provide diverse forms of financial aid to alleviate the financial strain on students, enabling them to pursue their studies with greater ease.

∴ Statistics on the Number of Disadvantaged Students in the Past Three Years

Types of disadvantaged students	2022	2023	2024
Low-income households	938	905	772
Lower-middle-income households	1,262	1,251	1,228
Children from families with hardship	192	194	183
Physical and mental disabilities	1,950	1,884	1,820
Indigenous Peoples	542	554	533
Other eligible participants for the higher education institution's program assisting disadvantaged students	888	783	771
Total	5,772	5,571	5,307

∴ Application Status of Various Financial Aid Measures

Scope	Number of applicants	Requested amount
Tuition and miscellaneous fees exemption	4,585	77,845,304
Student loans	8,504	248,069,928
Living Assistance Fund	840	16,020,000
Scholarship for Underprivileged Students in Higher Education Institutions	771	14,345,275
Emergency Relief	111	1,540,000
Free tuition for the first three years of the Five-year Junior College Program	988	7,467,842
Total	15,799	365,288,349



Outdoor experiential course with indigenous students



Discussion meeting with indigenous students

NKUST is not involved in matters related to student loan defaults. Students are required to repay loans in accordance with bank regulations, and banks advance the tuition and fees to NKUST. Therefore, no financial loss is incurred by the University in this regard. Regulations governing student loans follow the [MOE Regulations Governing Student Loans for Students of Senior Secondary Schools and Institutions of Higher Education](#) and the [NKUST Student Loan Guidelines](#). Quantitative data on student loans are summarized in the table below:

∴ Application Status of Various Financial Aid Measures in the Past 3 Years

Various Measures to Assist Students		2024	2023	2022
Tuition and miscellaneous fees exemption	Requested Amount (NTD)	77,845,304	82,592,633	84,792,312
	Number of applicants	4,585	4,845	4,945
Student loans	Requested Amount (NTD)	248,069,928	255,933,870	254,646,310
	Number of applicants	8,504	8,482	8,542
Other measures to assist students	Requested Amount (NTD)	39,373,117	26,904,827	37,261,868
	Number of applicants	2,710	2,700	2,759
Total	Requested Amount (NTD)	365,288,349	365,431,330	376,700,490
	Number of applicants	15,799	16,027	16,246

NKUST is committed to enhancing the public nature of higher education, particularly by providing multifaceted support to indigenous students. This support includes subsidies for entrance examination fees, transportation, and accommodation expenses, with the aim of promoting social mobility. At the same time, by strengthening admissions promotion activities, such as visiting senior high schools and vocational schools in indigenous and rural areas and inviting external groups to visit NKUST, the University enhances students' understanding of NKUST. This action helps students who are economically disadvantaged but with potential to access higher education, thereby promoting social mobility.

3.2

Sustainability Education

3.2.1

Sustainable courses



- Before the start of the semester, NKUST promotes sustainability concepts via the Freshmen Information webpage as part of the orientation guidance for new students. In addition, NKUST offers approximately 10,000 courses each academic year. In the 2023-2024 academic year, the University offered 1,465 courses related to sustainability topics (90 in five-year junior college programs, 1,119 at the undergraduate level, and 256 in graduate programs), accounting for about 13% of the University's total 10,698 course offerings in the 2023-2024 academic year. A total of 48 departments and 56 institutes offered sustainability-related courses, and 46 departments and institutes designated sustainability courses as required credits.
- During the 2023-2024 academic year, 1,465 sustainability-related courses were offered. Among these, the College of General Education and the Office of Innovation and Entrepreneurship Development jointly offered 378 sustainability-themed general education courses (374 in-person and 4 online), accounting for approximately 25.8% of the university's total sustainability courses. A total of 17,345 student-credits were enrolled in these courses.
- The primary educational focus of these courses centered on three sustainable core goals: "Industry, Innovation and Infrastructure", "Life Below Water and Life on Land", and "Quality Education". Among these, there were 298 courses (20%) under "Industry, Innovation and Infrastructure", 279 courses (19%) under "Life Below Water and Life on Land", and 240 courses (16%) under "Quality Education". Supporting core goals included "Decent Work and Economic Growth", "Good Health and Well-Being", and "Responsible Consumption and Production", comprising 96 courses (7%) under "Decent Work and Economic Growth", 95 courses (6.5%) under "Good Health and Well-Being", and 94 courses (6.4%) under "Responsible Consumption and Production". These sustainability development topic courses are integrated into curriculum design and development, enabling students to understand international trends and develop the literacy and skills necessary to address various future challenges.
- During the 2023-2024 academic year, 1,465 sustainability-related courses were offered to cultivate students' sustainability knowledge and competencies. Among these, the College of General Education and the Office of Innovation and Entrepreneurship Development jointly offered 378 sustainability-themed general education courses (374 in-person and 4 online), accounting for approximately 25.8% of the university's total sustainability courses. Based on course planning and evaluation, a total of 17,345 student-credits completed these courses.
- With "Industry-Oriented Quality", "Innovation and Entrepreneurship", and "Marine Technology" as the three core characteristics of NKUST's institutional development, the Center for Liberal Arts Education has designated "Marine Technology and Sustainability" and "Creativity and Innovation" as University-level general education courses. These courses align institutional features with the United Nations Sustainable Development Goals (SDGs) to deepen students' sustainability literacy. The "Marine Science and Technology and Sustainability" course integrates marine resource conservation, environmental sustainability, and technological applications to guide students in understanding the importance of coexistence between humans and nature. The "Creativity and Innovation" course uses design thinking, interdisciplinary integration, and practice-oriented learning to cultivate students' ability to respond to social and sustainability issues with innovative thinking. These courses integrate humanistic values with technological practice, open to all students across the university, showcasing NKUST's distinctive sustainability-oriented general education approach.



The Cross College Elite Tech Program at NKUST and the Office of International Affairs organized a lecture titled "Next Step of Freeing Robots by Artificial General Intelligence"



∴ Statistics on the Number of Sustainable Courses and Required Courses for Each Department in the Past Three Years

College/Center	Undergraduate De-partment			Graduate School			Five-year Junior College			Whether There Are Any Required Credits		
	2024	2023	2022	2024	2023	2022	2024	2023	2022	2024	2023	2022
College of Engineering	118	105	107	44	50	46	14	13	10	Yes	Yes	Yes
College of Intelligent Mechanical and Electrical Engineering	27	24	20	7	4	5	8	9	6	Yes	Yes	Yes
College of Electrical Engineering and Computer Science	40	42	36	26	24	19	-	-	-	Yes	Yes	Yes
College of Maritime	111	110	104	21	20	22	28	27	28	Yes	Yes	Yes
College of Hydrophere Science	207	206	215	43	33	39	31	29	23	Yes	Yes	Yes
Business Intelligence School	64	38	41	22	12	6	-	-	-	Yes	Yes	Yes
College of Management	92	72	71	55	47	42	-	-	-	Yes	Yes	Yes
College of Marine Commerce	65	58	51	19	18	21	-	-	-	Yes	Yes	Yes
College of Innovation and Design	7	7	5	13	9	12	-	-	-	Yes	Yes	Yes
College of Foreign Languages	17	13	17	6	3	5	-	-	-	Yes	Yes	Yes
College of General Education	346	336	353	-	-	-	9	9	9	Yes	Yes	Yes
Office of Innovation and Entrepreneurship Development	23	23	26	-	-	-	-	-	-	No	No	No
Cross College Elite Tech Program at NKUST	2	3	3	-	-	-	-	-	-	Yes	Yes	Yes
Total	1,119	1,037	1,049	256	220	217	90	87	76	-	-	-



3.2.2

Extension Education

In an era emphasizing net zero and carbon neutrality, NKUST has been actively promoting the United Nations Sustainable Development Goals since 2018, aiming to assist industries in cultivating cross-disciplinary talent to help enterprises drive sustainable development and become contributors to 'value creation'. In the face of global warming, net-zero carbon emissions have become a critical international issue in recent years, with governments and businesses striving toward "zero" carbon emissions. Consequently, both globally and in Taiwan, "carbon footprint management" is being developed to reduce carbon emissions. Product carbon footprints have also become an essential tool for achieving carbon reduction goals. For enterprises and organizations, carbon footprint inventories and related reports and calculations, using "carbon" as the measurement unit, are becoming major topics. To ensure that products from Taiwan remain competitive in international markets, and to respond to overseas clients' requests for carbon footprint inventories along the supply chain, NKUST has designed sustainability-related courses to provide in-service workers and soon-to-be-employed youth with sustainability expertise, while also serving local industries and helping them keep pace with future trends and government policies.

In addition to offering academic and non-academic staff opportunities to learn and train in sustainability-related fields, NKUST also serves local industries by offering courses such as: ISO 14064-1:2018 Organizational Greenhouse Gas Inventory Internal Auditor Workshop, ISO 14067:2018 Carbon Footprint Management and Calculation Fundamentals Course, and ISO 14067 Product Carbon Footprint Lead Auditor Training Course. Furthermore, under the Industry Talent Investment Program, NKUST offers bachelor credit programs in Net-Zero Building, Net-Zero Building (duplicate emphasis in planning), Electric Vehicle Mechatronics Integration, Organizational Greenhouse Gas Emission Verification, Greenhouse Gas Emission and Product Carbon Footprint Inventory (enterprise cohort), Carbon Footprint Inventory, and ISO 14064-2 and ISO 14068-1 Carbon Technology Management. Under the "New Generation Talent" Program, NKUST offers the Corporate Sustainability Manager Training Program, Carbon Inventory Data Visualization and Corporate ESG Analysis Planner Training Program, Circular Economy and Industrial Carbon Inventory Talent Training Program, and ESG Net-Zero Talent Project Manager Training Program.

∴ Status of Continuing Education and Sustainability-Related Course Offerings in the Past Three Years

Item	2023/2024 Academic Year	2022/2023 Academic Year	2021/2022 Academic Year
Total number of courses	266	289	527
Sustainability-Related Courses	14	8	95
Number of Graduates	8,273	8,387	8,723

3.2.3

Continuing Education

Since its establishment in 1979, NKUST has dedicated itself to enhancing the professional skills of working professionals, promoting lifelong learning and continuous improvement of professional knowledge. This is done to meet the manpower needs of local industries and fulfill its social responsibility, making it the only national institution of higher learning in southern Taiwan dedicated to continuing education.

To adapt to the current educational environment, the Institute of Continuing Education at NKUST will cease accepting applications for the following 9 departments, effective from the 2023-2024 academic year, in accordance with the Ministry of Education's approval: Business Administration, Civil Engineering, Electrical Engineering, Accounting Information, Industrial Engineering and Management, International Business, Mechanical Engineering, Applied English, and Tourism Management. The Continuing Education Division's two-year technical program will integrate the 7 departments of the former Institute of Continuing Education: Business Administration, Civil Engineering, Electrical Engineering, Accounting Information, Industrial Engineering and Management, International Business, Mechanical Engineering, Applied English, and Tourism Management into NKUST's two-year technical program system. This integration will complete the transformation of the Institute of Continuing Education, enhancing resource utilization efficiency, expanding recruitment sources, and increasing enrollment rates.

NKUST's two-year technical program is a two-year program. The standard duration of study is two years, with a maximum extension of four years. Upon completion of all required course credits, a Bachelor's degree and a degree certificate will be awarded. Admission requirements include graduation from a domestic public or private junior college or higher, graduation from a foreign junior college or higher recognized by the Ministry of Education, or those with equivalent qualifications. Instruction is scheduled for Saturdays and Sundays, making it convenient for working professionals to balance their work and studies. The curriculum design emphasizes practical experience, supports personalized learning, and promotes sustainability education for adults.

∴ Number of Graduates from the Institute of Continuing Education in the Past 3 Years

Academic Year	Number of Graduates
2023	265
2022	265
2021	299

3.2.4

Digital Courses



MOOCs (Massive Open Online Courses)

NKUST actively develops MOOCs (Massive Open Online Courses), which refer to large-scale open online courses that are made available to online learners through the internet. NKUST has been recognized with the 'National Open Education Excellent Course' award for three consecutive years (2022-2024). In the current year, NKUST offered 20 courses, attracting 3,868 students, with a total of 66,565 video views. Two brand-new courses, "The Story of Kaohsiung Port" and "Learning German from Scratch", were launched, further diversifying course topics and expanding NKUST's influence in the field of MOOCs.

Summer Online School

In 2023, we continued to permit students to enroll in online courses taught by external instructors to fulfill their general education requirements. Moreover, we took part in the SOS Summer Online School offered by National Yang Ming Chiao Tung University during the summer break. This program enabled incoming freshmen to engage in self-study during the summer and earn credits toward their general education requirements upon enrollment. In 2024, there were 3,796 students participating in online self-study, fostering diverse learning opportunities for students.

Online Teaching System

The university is actively developing online teaching systems, including the 'ZUVIO Cloud-based Real-time Interaction System' and the 'Teaching Platform.' ZUVIO provides online testing, feedback discussions, peer evaluations, and student management functions. Its usage rate has been increasing year by year. As of the 2023/2024 academic year, more than one-fifth of courses utilized ZUVIO for real-time feedback in teaching. Each semester, the system records over 3,500 instances of faculty usage, and students engage with it approximately 40,000 times per week on average. The teaching platform, functioning as a digital learning management system, provides functionalities for uploading teaching materials, submitting assignments, conducting online assessments, engaging in discussions, and facilitating remote classrooms. The number of platform uses exceeds 2.2 million per academic year.

∴ Number of users on the teaching platform in the past 3 academic years

Unit: person-times



2023/2024 Academic Year
Number of users on
the teaching platform

2,275,140



2022/2023 Academic Year
Number of users on
the teaching platform

2,444,529



2021/2022 Academic Year
Number of users on
the teaching platform

2,818,580

3.2.5

Marine Specialty Research Courses

To enhance maritime knowledge and fulfill its social responsibility as a university, NKUST has taken active steps to promote marine education. This includes providing general education courses on the ocean, hosting seminars related to the marine industry, and organizing activities to deepen students' knowledge of the ocean and increase awareness about marine-related concerns. These endeavors aim to instill a sense of responsibility towards the ocean and encourage the sustainable development and utilization of marine resources. Status of the General Exploration Course on Marine Science and Technology offered in the 2023-2024 academic year is as follows:

Statistics of Enrollment in the General Exploration Course on Marine Science and Technology

Semester	Number of Courses	Number of Students Enrolled
2023-1	15	948
2023-2	12	879
Total	27	1,827

The Marine General Education Courses hold an industrial lecture series each semester, inviting experts and scholars from the marine field to serve as speakers. The series covers topics such as marine recreation, maritime technology, port logistics, marine biotechnology, fisheries development, marine environment, and aquaculture enhancement, aiming to cultivate students' ocean literacy and enhance their understanding of the marine industry. NKUST has organized marine education outreach activities in areas such as marine cultural experiences, water safety education, marine sports experiences, marine science popularization activities, and marine environment and ecological education. These hands-on and outdoor teaching approaches enable students to learn through practical engagement and encourage their active involvement. In 2024, a total of 17 ocean education activities were conducted, engaging a collective of 3,061 participants.

In response to National Ocean Day, NKUST and the Taiwan Wetland Conservation Association jointly held the "Intertidal Zone Ecology Exploration Journey" activity at Yuanjhong Wetlands Park in June 2024 to pay tribute to the ocean, promote marine environmental conservation concepts, and raise public awareness of marine ecology. The activity combined ecological conservation lectures with guided ecological exploration tours, attracting 18 local family groups from Kaohsiung, totaling 58 participants. Participants reported that allowing their children to experience wetland ecosystems firsthand was a valuable experience that not only enhanced parent-child relationships but also deepened their understanding of the importance of ecological conservation and raised awareness and knowledge of marine ecology.



Intertidal Zone Ecology Exploration Journey

To further promote marine-related knowledge, NKUST participated in the Chiayi City "Science 168 Education Expo" in July 2024 with an exhibit titled "NKUST Marine Technology Development Office - New Life for Marine Debris: Creative Handicrafts", which integrated knowledge-based and experiential activities. The exhibition echoed marine conservation and sustainability issues and included content such as understanding marine debris, learning about low-, medium-, and high-water-retention materials, and hands-on ecological bottle DIY activities. Through an edutainment-oriented activity design, the University enhanced students' awareness of marine environmental issues and conservation. Over five days, the Expo attracted 2,551 elementary and junior high school students.



Science Education Expo

In November 2024, NKUST held the "Creative Artificial Lure Handcraft Experience" activity, inviting faculty and students from Jiucheng Elementary School to participate. The activity included a brief introduction to basic fishing knowledge and a DIY lure painting workshop. A total of 20 students took part. Through hands-on practice, the students gained basic knowledge of fishing tackle operations, learned the reasons for using lures, and were introduced to concepts of circular economy, resource reuse, and marine conservation. They completed 20 pieces of lure paintings and realistic fish-shaped ornaments.



"Creative Artificial Lure Handcraft Experience" activity

In response to the rise of global sustainability thinking and NKUST Sustainability Month, NKUST organized the "Kezailiao Cultural Tour". Through guided tours by the Kezailiao Cultural Association, university students learned about the temples and harbor history of Kezailiao, the operation of fish markets, cooperation models between fishermen and fishermen's associations, and issues such as food safety of fishery products and marine conservation. The activity helped students further understand how to build sustainable coexistence between humans and ecosystems, nurturing sustainability literacy, a sense of environmental responsibility, and civic awareness, and enhancing students' sensitivity and critical thinking about environmental ecology. A total of 38 students participated. After the event, students reported having new experiences related to temple culture and fishery operations, with the fish market auction process leaving a particularly deep impression. They also found the symbolic meanings of temple statues and architectural designs to be especially memorable.



Kezailiao Cultural Tour

Offshore Wind Power Talent Development

NKUST supports the government's coastal tourism and recreation development initiative by offering training for commercial powerboat operators, aiming to help students interested in obtaining professional licenses. Since 2019, 13 professional training courses have been conducted, totaling 202 participants. These courses include in-house faculty training and cross-campus student training. The plan is to launch another training course by the end of 2025 to promote talent cultivation for the marine tourism industry.

To strengthen the cultivation of key talents in renewable energy technologies, NKUST established the Offshore Wind Power Maritime Engineering Elite Training Base at the Cijin Campus, which is a training facility certified by the Global Wind Organization (GWO). Students who perform outstandingly in courses may be directly recruited by industry instructors or recommended for employment in related industries, achieving the goal of applying what they have learned and seamlessly transitioning into the workplace. In addition, in line with Taiwan's renewable energy policy, NKUST has implemented an offshore wind power workforce training program, selecting faculty to attend overseas wind power training centers to obtain GWO Basic Safety Training (BST) and Basic Technical Training (BTT) certificates, and cultivating them as seed instructors. Since 2020, NKUST has offered GWO BST training courses and, starting from 2021, has promoted GWO BTT courses, providing students with diverse and forward-looking employment opportunities. To date, NKUST has conducted nine cohorts of GWO BST training, achieving remarkable outcomes and demonstrating the contribution of technical and vocational education to energy transition and marine industry upgrading.



3.3

Campus Sustainability Practices

3.3.1

Sustainable Clubs

There are four sustainability-related student clubs in total. At the First Campus, the Animal Protection Club corresponds to SDGs 14 and 15, while at the Nanzih Campus the Deep Blue Club, at the Jiangong Campus the Water Activities Club, and at the Cijin Campus the Canoe Club all correspond to SDG 14: "Life Below Water".

 all correspond to SDG 14	Animal Protection Club	Educates students and promotes care for disadvantaged groups by advocating animal protection concepts and directly helping stray animals, encouraging kindness toward all animals, and thereby contributing to social harmony. Promotes the concept of "adopt instead of buy, neuter instead of cull" and implements TNVR (Trap, Neuter, Vaccinate, Release) programs.
	Canoe Club	Encourages members to understand and connect with the ocean, promotes knowledge related to marine conservation, and advocates the spirit of adventure while making good use of campus resources.
	Diving Blue	Leads students to understand and learn about the ocean from different perspectives.
	Water Activities Club	Aims to promote safety concepts and techniques related to water activities.



Midway Wisdom Buddhism Club promoted vegetarian and low-carbon diets as the main theme of its activities



Cijin English Learning Club combined English teaching with a beach cleanup, leading students to Cijin Beach



The Diving Blue Club carried out a beach cleanup activity in the area surrounding the Cijin Shell Museum

3.3.2

Sustainable-related Activities

Sustainable development is a long-term goal and direction. NKUST promotes sustainability to a broader group of faculty and students through a variety of campaigns and activities. In 2024, the University organized 13 sustainability-related events, with a total of 434 participants (approximately 2% of the total student population). Other sustainability-related activities involve multiple student clubs, such as the Esin Club at the First Campus, the Water Activities Club at the Jiangong Campus, the Diving Blue, the Midway Wisdom Buddhism Club, and the 4-H Club at the Nanzih Campus, as well as the Canoe Club and Cijin English Learning Club at the Cijin Campus. The primary focus of the activities was on marine education, while some student clubs also organized events related to low-carbon diets and waste utilization.

∴ The number of sustainable-related events and participants

Sustainable-related Activities	Session	Number of Participants
On-campus Activities	9	862
Off-campus Activities	12	934





International Symposium on Sustainable Biorefinery and Circular Economy International Conference



On the Contribution of University Social Responsibility to Sustainable Development and Marine Affairs Forum



International Symposium on Advancing Sustainable Net-Zero Strategies



Attended the 2024 Taiwan Innotech Expo



2024 Symposium on Environmental Safety and Health Engineering and the 21st Academic Conference on Environmental Protection and Nanotechnology

I. "Guarding Agongdian River with Our Families" - NKUST and Fubon Jointly Organize a River Protection Activity

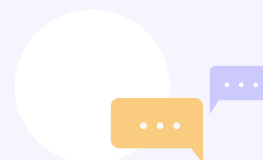
Fubon Life Insurance and NKUST jointly promoted the "Endless Flow of Carbon and Water Footprints" project and, in November 2024, organized the "Guarding the Creek with Our Families" cleanup activity at the estuary of Agongdian Creek. Students, local residents, and volunteers removed a total of 226 kilograms of waste, with plastic being the largest category. The activity emphasized that rivers are a key line of defense preventing waste from entering the ocean. Through concrete actions, it raised awareness of water resources and environmental protection and promoted waste sorting and recycling, putting sustainability principles into practice.



Coastal cleanup activity

II. Status of Tutoring and License Counseling

In the process of promoting sustainable development, academic tutoring for students is an important component of realizing sustainability education goals. Through effective tutoring, NKUST not only narrows learning gaps and improves education quality but also ensures that every student has equitable access to learning resources, echoing SDG 4 "Quality Education" of the United Nations Sustainable Development Goals. To provide students with diversified academic tutoring and cultivate self-directed learning and problem-solving abilities, NKUST offers group after-school tutoring, teaching assistants, faculty Q&A sessions, and study groups. In the 2023-2024 academic year, the University opened 256 after-school tutoring courses, serving 25,744 student instances. To develop students' professional skills and help them obtain core competency licenses, NKUST subsidizes departments to run professional license counseling classes, enhancing students' practical abilities and employability. In 2024, NKUST offered 33 counseling classes, resulting in students obtaining 691 professional licenses. Combined with license examination incentive measures, the license pass rate reached 83%.



3.3.3

Service Learning and Rural Service

NKUST continues to promote service learning and caring for remote areas. In 2024, the University cooperated with five junior high and elementary schools to serve 231 students, organizing music camps and final performance events that integrated SDG concepts into curriculum design and deepened the integration of learning and practice. At the same time, diversified professional service courses were offered, including air pollution and water quality surveys, bicycle maintenance, and electrical appliance repair, putting energy conservation, carbon reduction, and local contribution into practice. In addition, NKUST carries out on-campus and off-campus social service activities, non-credit volunteer services, and community events, and organizes SDG-themed micro-film competitions to showcase young people's engagement in society and their actions in promoting sustainability. Relevant outcomes are as follows:

Item	Summary of Contents
Junior high and elementary school services	In cooperation with junior high and elementary schools, the Wind Band organized camps that, in addition to teaching history of music and instrument types, allowed children to experience instruments firsthand and culminated in a performance showcase, aligning with the high-quality service goals of the SDGs. In the design of NKUST's service education courses, in addition to environmental service education, we have specifically established 'Professional Service Education' and 'Social Service Education' courses. These courses allow students to immerse themselves in the community and actively participate in SDGs issues.
Professional Service Education Courses Department of Environmental Safety and Health - Air Pollution and Water Quality Investigations	Guide students in conducting air pollution and river investigations, thereby promoting energy conservation, carbon reduction, and sustainable development
Professional Service Education Courses Department of Mechanical and Electrical Engineering - Bicycle Maintenance	Maintain the functionality of public bicycles, with guidance provided by the Department of Mechanical and Electrical Engineering
Professional Service Education Courses Department of Telecommunication Engineering - Electrical Appliance Repair	Guide students in repairing electric fans to give back to society while emphasizing environmental protection and reuse

Item	Summary of Contents
Social Service Education Courses On-campus unit services	Students provide services in administrative and academic units on campus, integrating SDGs concepts
Social Service Education Courses Off-campus institutional services	Students serve in charitable organizations, including after-school tutoring, care for older adults, and health education promotion, with a total of 38 participants
Promotion of non-credit-based volunteer services	Organize community activities that integrate social work expertise with community networks to promote positive support and SDGs implementation
Micro film competition	Organize a micro film competition that integrates the core values of service learning with the concepts of the United Nations Sustainable Development Goals (SDGs), using the power of visual storytelling to raise awareness among students and audiences regarding SDGs-related issues

3.4

Sustainable Product Development

The Product Promotion Center launched the "NKUST Boutique" brand store DK SHOP in 2020, the first brand store established by any university in Taiwan, showcasing innovative products and souvenirs jointly developed by faculty, students, and industry partners, thereby embodying the unique value of the University's brand. DK SHOP adopts SDG 12 "Responsible Consumption and Production" as its core concept, promoting sustainable management and efficient use of natural resources. Through measures such as prevention, reduction, recycling, and reuse, DK SHOP effectively reduces waste and provides safe, trustworthy, fresh, and high-quality products. Its offerings include food, cosmetics, and household items, all of which are listed according to seasonal availability and production regions.

To effectively manage the brand image, a review committee mechanism has been established for product listing and sales. The committee conducts rigorous reviews of all products applying for listing to ensure product quality, strengthen market competitiveness, and enhance overall marketing performance. All products that pass review and are successfully listed obtain authorization to use the University emblem, thereby simultaneously achieving the objectives of brand supervision and quality commitment and ultimately realizing the vision of sustainable brand management. The following presents statistics on DK SHOP product listing reviews from 2022 to 2024:



DK SHOP Retail Store

∴ Statistics on Trademark Licensing Cases Over the Past Three Years

Year	Number of Reviewed Products Approved	Number of Reviewed Products Not Approved	Best-Selling Product Representatives of the Year
2024	42	4	Outstanding Bone Builder
2023	26	0	Outstanding Bone Builder
2022	40	0	Outstanding Bone Builder

DK SHOP represents more than product sales; it also showcases the University's diverse achievements in R&D and sustainability practices, as reflected in the following representative products:

- Marine collagen skincare series: Developed by a faculty research team using patented technology to extract high-purity natural marine collagen from tilapia skin, preserving the native collagen structure and effectively promoting skin repair and revitalization. This achieves high-value utilization of fish by-products in skincare products.
- Marine ranch aquatic product series: Adopts a low to medium stocking density model in combination with probiotic communities fermented from okara, thereby establishing a friendly aquaculture system that balances resource circulation and ecological equilibrium. This model avoids overburdening soil and water resources and produces fresh, delicious, and environmentally friendly green-energy aquatic products, achieving a win-win outcome for ecology and the economy.
- "Freshy Essence" nutritional supplement series Uses grouper bone and other by-products as the collagen source, implementing whole-fish utilization and zero waste of marine resources. The products are co-produced with local aquaculture enterprises, supporting the transformation and sustainable development of Taiwan's fisheries sector and further reducing reliance on imported resources and overall carbon footprints, in line with SDG 12 "Responsible Consumption and Production" and SDG 14 "Life Below Water".
- "NKUST Changes the World" diffuser stone: Innovatively uses discarded water caltrop shells, which are calcined at high temperatures into "Water Chestnut Biochar" with a porous structure that effectively adsorbs ozone and volatile organic compounds (such as formaldehyde), providing both deodorizing and diffusing functions. By combining this material with cement to form diffuser stones, the product not only enhances diffusion efficiency but also realizes circular reuse, carbon sequestration, and energy conservation and carbon reduction goals.



Marine collagen skincare series



Marine ranch dragon-tiger grouper



"Freshy Essence" grouper extract



Diffuser stone base with NKUST emblem



"NKUST Changes the World" diffuser stone

3.5

Academic Performance

3.5.1

Research Projects and Papers on Sustainability

The global climate change is becoming increasingly severe, and sustainability issue has clearly emerged as a shared goal for global cooperation and future development. Through research on sustainability issues, efforts are being made to strike a balance between global development and environmental protection. In 2024, our university implemented a total of 322 research projects, with 221 related to sustainability, accounting for approximately 68.63%. 205 (faculty) members led these sustainability-related research projects.

To align with national policies and local industrial development needs, the University has established research centers that also focus on sustainability issues in their technology development. For example, the Intelligent Polymer Materials Center integrates resources across disciplines such as mechanical engineering, mold and die, electrical and electronic engineering, chemical engineering, management, and arts and humanities to introduce smart manufacturing and applied technology. It is organized into three main specialties: intelligent data and manufacturing equipment IoT, intelligent molding analysis, and intelligent manufacturing real-time sensing/monitoring, and it further develops customized solutions for smart production processes, smart machinery design and assembly, intelligent value-added software, and process applications. In addition, the Carbon Neutral and Energy Technology Research Center aims to strengthen energy technology development and talent cultivation. By leveraging energy applications in academia, the Center expands energy technology teams, enhances comprehensive research performance in the field, and effectively utilizes research manpower at universities and colleges to carry out forward-looking research and cultivate energy technology talent, thereby completing the domestic upstream, midstream, and downstream energy technology R&D system.

Based on the regulations of the Office of Research and Development of NKUST regarding awards and subsidies, the 'National Kaohsiung University of Science and Technology Paper Scoring Table' serves as a guideline to encourage faculty to incorporate keywords related to the 17 Sustainable Development Goals (SDGs) into their paper titles, abstracts, or keywords. Additionally, if these papers correspond to the SDGs in the Scopus database (as queried on February 17, 2025), achieving this goal will result in additional weight being applied to each published paper's scoring. In 2024, a total of 800 journal articles were published by our faculty, with 318 of them related to sustainability issues, accounting for approximately 39.75%, demonstrating our faculty's commitment to sustainability-related issues and the ongoing development of our faculty's research in sustainability-related topics.



∴ Statistical Table of Sustainable Research Projects and Papers

College/Center	Total Number of Research Projects	Number of Sustainable-Related Research Projects	Total Number of Published Journal Papers	The Number of Published Journal Articles Related to Sustainability
College of Engineering	58	36	138	63
College of Intelligent Mechanical and Electrical Engineering	48	26	117	25
College of Electrical Engineering and Computer Science	60	42	155	47
College of Maritime	20	17	32	14
College of Hydrophere Science	48	40	205	115
Business Intelligence School	15	13	48	23
College of Management	45	29	69	19
College of Marine Commerce	11	9	23	8
College of Finance and Banking	0	0	2	-
College of Innovation and Design	6	3	1	1
College of Foreign Languages	6	2	5	2
College of General Education	2	2	4	-
Innovation and Entrepreneurship Education Center	0	0	-	-
Cross College Elite Tech Program at NKUST	2	1	-	-
Office of Academic Affairs	1	1	1	1
Total	322	221	800	318

∴ The Number of Sustainability-Related Research Projects and Journal Articles in the Past 3 Years

Type	2024	2023	2022
Sustainability-Related Research Projects	221	199	141
Journal Articles Related to Sustainability	318	340	283

∴ Statistics on Patents Over the Past 3 Years

Unit: case

Type	2024	2023	2022
Number of Patent Announced for Substantive Examination in the Republic of China	64	56	56
Number of Patent Announced for Substantive Examination in Other Countries	5	7	6
Number of Patent Announced in the United States	6	2	3
Number of Announced Granted Patents	1	3	5



3.5.2

Open Access Journal Article

Open Access refers to making content freely available for readers, with the primary aim of ensuring that everyone has the right to access knowledge freely and without cost. In 2024, our school's faculty members published a total of 800 journal articles. Among them, 234 articles were published in Open Access journals, accounting for approximately 29% of the total, emphasizing our school's dedication to sharing research findings and fostering an environment of academic knowledge freedom and fairness.

∴ Number of Open Access Journal Articles

College/Center	Total Number of Published Journal Papers	Number of Open Access Journal Articles	Proportion of Open Access Journal Articles
College of Engineering	138	36	26%
College of Intelligent Mechanical and Electrical Engineering	117	27	23%
College of Electrical Engineering and Computer Science	155	65	42%
College of Maritime	32	10	31%
College of Hydrophere Science	205	55	27%
Business Intelligence School	48	4	8%
College of Management	69	26	38%
College of Marine Commerce	23	4	17%
College of Finance and Banking	2	2	100%
College of Innovation and Design	1	1	100%
College of Foreign Languages	5	-	-
College of General Education	4	3	75%
Innovation and Entrepreneurship Education Center	-	-	-
Cross College Elite Tech Program at NKUST	-	-	-
Office of Academic Affairs	1	1	100%
Total	800	234	29%

∴ Number of Open Access Journal Articles in the Past 3 Years

Type	2024	2023	2022
Total Number of Published Journal Papers	800	796	958
Number of Open Access Journal Articles	234	367	525
Proportion of Open Access Journal Articles	29%	46%	55%

3.5.3

Collaborative Sustainable Industry-Academia Projects



Deepening Industry-academia Cooperation to Bridge the Skills Gap

The University has long devoted itself to supporting enterprises in industrial parks, industrial zones, and science parks in upgrading and transforming, and has further developed a talent-training-based industry-academia model to substantially narrow the widely criticized gap between academic training and industry needs. Starting from talent positioning and corporate development visions, the University traces back to the foundational competencies and core technologies underlying advanced technical capabilities and provides a project-based learning environment in which students "learn by doing". Under a co-teaching structure involving both University faculty and industry experts, students are guided to develop the ability to identify and solve problems. The courses integrate key competencies in communication and expression into a problem-based learning environment so that students can practice and apply these skills in real contexts.



Introducing Production Line Practices to Promote Sustainable Upgrades in Industrial Parks

Given the rapid acceleration of global net-zero and sustainability trends and the increasingly stringent regulatory requirements, enterprises often find themselves unprepared and unsure where to begin. In response, the University's on-campus advisory teams have diligently and frequently visited enterprises in industrial parks. With professional technical support, they help companies overcome immediate challenges while simultaneously leading students to engage with actual production lines, understand corporate operating logic and decision-making priorities, and build trust and rapport with enterprises from the ground up. Step by step, the University and companies co-create clear technical roadmaps to complete collaborative projects within the given timeframe and implement them in the largest-scale enterprises. The approach embodies a demonstration and diffusion model to drive shared prosperity and overall enhancement of the entire industrial park.



Leveraging Policy Resources to Cultivate Carbon Management and Sustainability Professionals

For two consecutive years, the University has assisted enterprises through the "Low-Carbon and Smart Upgrading and Transformation Counseling Program for Manufacturing" under the Industrial Development Administration, MOEA. The program helps companies understand their actual carbon emissions and energy consumption and, through program subsidies, focuses on training and establishing a seed instructor cultivation mechanism. In 2023 and 2024, a total of 100 cases were approved, with subsidies of NT\$20 million, and 82 individuals obtained TUV and SGS ISO carbon management and sustainability-related training certificates. Twenty-eight people obtained AFNOR ISO 14064-1:2018 Greenhouse Gas Lead Verifier Training Certificates.





Faculty-Industry-Academia Collaboration Platform

To enhance the collaboration efficiency between teachers and industries, NKUST has established the Faculty-Industry-Academia Collaboration Platform. The platform provides information on teachers' research and development achievements, industry trend analysis, and introductions to school-level research centers. It also incorporates a membership mechanism to facilitate a quick understanding of the research achievements and professional fields of teachers at our university, fostering more industry-academia collaborations.



NKUST Industry-Academia Collaboration Platform



Industry-Academia
Collaboration Platform

NKUST will continue to invest in the field of sustainable development through industry-academia collaboration, striving to improve society and the environment. Our objective is not only to deepen academic research, but also to promote social engagement and industrial development. Through close collaboration with industry, we are committed to cultivating professionals with the ability to solve real-world problems, injecting new vitality into the development of society and industry.

Statistics on Industry-Academia Collaboration Projects over the Past Three Years

Unit: cases, NT\$

Item	2024	2023	2022
Total Number of Industry-Academia Collaboration Projects	837	737	628
Number of Sustainability-related Industry-Academia Collaboration Projects	246	88	125
Amount of Sustainability-related Industry-Academia Collaboration Projects	421,975,439	76,749,036	205,317,377



Developing Intelligent Scheduling and Energy-Saving Carbon Reduction Systems to Enhance Factory Automation Efficiency

Professor Liu, Tung-Kuan of the Department of Mechanical and Electrical Engineering, has developed a "multi-objective dynamic self-adaptive intelligent scheduling and energy-saving carbon reduction" technology that uses multi-objective optimization genetic algorithms, big data analytics, deep learning, power monitoring, and PDCA closed-loop management to surpass the efficiency of traditional manual scheduling. The system allows users to set multiple objectives and parameters according to their needs and simultaneously considers factors such as manpower, machines, materials, energy, and carbon reduction in line with ESG issues. This technology can significantly improve factory production efficiency while reducing energy consumption and carbon emissions and further enables companies to track carbon footprint data and achieve energy-saving and carbon reduction goals. By using the optimized scheduling results to perform carbon inventory and combining them with energy-saving systems using permanent magnet-free synchronous motors, the upgraded motors reduce energy consumption and achieve optimal energy savings of up to 91.2%, providing enterprises with highly adaptive and cost-effective solutions.



Promoting Ai Acoustic Predictive Maintenance and Thermal Runaway Prevention Technologies to Move Toward Net Zero

Professor Chen, Yen-Ming of the Department of Information Management promotes AI algorithm applications and has established an Artificial Intelligence Innovation Laboratory. The algorithm can be used to calculate reflections and feedback of various waves, providing the basis for AI judgment models. The "non-contact acoustic predictive maintenance and thermal runaway prevention technology for net-zero carbon emission automated factories" uses sound and optical data to perform non-contact fault detection and service-life estimation in automated factories, serving as the basis for predictive maintenance and risk decisions regarding damage repairs. In addition, the team has developed an "AI-based Digital Twin (DT) learning model" that aligns simulated experimental data with on-site single-sided data to calibrate the accuracy of the DT model. Using this reliable model and specialized algorithms, the system extracts a composite set of effective prediction features (for example, fewer than 10), facilitating fault-type prediction and achieving an expected error margin within 3%. This optimized DT cluster compensates for the lack of fault pattern data from actual sites, greatly simplifying predictive maintenance and equipment upkeep.

3.5.4

Sustainable Government Collaboration Projects

In 2024, our university undertook a total of 130 industry-academia collaboration projects with government agencies, among which 36 were related to sustainable development, with a total amount of approximately NT\$91.96 million. The projects primarily focus on addressing the issues of SDG 4 (Quality Education), SDG 13 (Climate Action), and SDG 14 (Conservation of Marine Ecosystem) and related issues. Specifically, initiatives related to quality education include the Cijin Sustainable Environmental Education Field Development Project, Wildlife Education and Advocacy Program, and Open Water Sports Education Center Project. In terms of marine ecosystem conservation, this includes the marine pollution monitoring and reporting task force project, the Indian Ocean Shark Fishery Resource Assessment and Risk-Free Assessment Study, and the Kaohsiung Marine Environment Monitoring Program. With regard to climate change adaptation, projects included a climate change adaptation plan for bivalve aquaculture management in Tainan and the development of adaptive strategies for major aquaculture species under climate change in Taiwan's aquaculture industry.

To align with national policies and local industrial development needs, the University cultivated cross-disciplinary R&D teams between 2023 and 2024 and established specialized research centers that also focus on sustainability issues in technology development. For example, the Intelligent Polymer Materials Center develops high-efficiency precision mold technologies to improve product quality and efficiency and reduce energy consumption and carbon emissions during product forming cycles; the Carbon Neutrality and Energy Technology Research Center focuses on "sustainable energy - development and application of clean green gases" and "circular technologies - energy-saving smart production" as its core areas.



Intelligent Polymer Materials Center



Carbon Neutral and Energy Technology Research Center



Actively Participating in Innovation Technology Exhibitions to Showcase R&d Outcomes and Translation Capabilities

The Office of Industry-Academia Cooperation team actively plans each year to participate in the Taiwan Innotech Expo, systematically integrating and exhibiting the University's promising research outcomes. By leveraging the professional exhibition platform, the University enhances the visibility of its technologies, strengthens matchmaking with industry, and further promotes technology transfer and industry-academia collaboration opportunities, thereby demonstrating its innovative R&D capabilities and technology commercialization strength. From October 17 to October 19, 2024, the University exhibited at the Taipei World Trade Center. This year's expo attracted 431 exhibitors from 20 countries with more than 1,200 booths, and over 50,000 visitors attended over the three days. The University received outstanding recognition, winning 5 gold medals, 3 silver medals, 3 bronze medals, and 1 corporate special award.



Taiwan Innotech Expo

"Taiwan Ocean Spatial Footprint" Coral Reef Conservation CoralWatch Citizen Science Workshop

The National Academy of Marine Research, National Museum of Marine Science and Technology, and NKUST jointly worked with the University of Queensland in Australia to hold Taiwan's first CoralWatch citizen science ambassador workshop in Hengchun, promoting coral reef conservation and monitoring technologies. This initiative made Taiwan the first overseas country to host CoralWatch training, thereby enhancing its international visibility. CoralWatch is a global coral health monitoring program that tracks coral bleaching and climate change impacts using standardized color chart tools and currently covers approximately 80 countries. The workshop invited experts from Australia and Taiwan as instructors. The curriculum focused on coral conservation knowledge and practical skills to cultivate conservation ambassadors with an international perspective. The 16 participants came from across Taiwan and included dive instructors, students, and marine conservation practitioners. The workshop aimed to deepen public understanding of coral reef crises and, by combining academic resources with local actions, promote the sustainable development of coastal communities.



CoralWatch Workshop

2024 Marine Pollution Monitoring and Reporting Task Force Project

This project is dedicated to establishing a comprehensive monitoring and response system for marine pollution incidents. Through a 24-hour reporting mechanism, dedicated hotlines, and a cross-agency contact network, the project effectively prevents and manages maritime accidents and pollution events. During the project period, the team monitored oil transfer operations and reviewed pollution prevention measures. It classified and analyzed reported incidents and produced risk maps to enhance the effectiveness of response planning. In 2024, the project completed the establishment of dedicated hotlines and 13 contact lists; conducted 122 AIS monitoring operations during oil transfer; documented 9 marine waste incidents; updated 812 vessel review cases; and continued to refine review guidelines and reporting manuals. Regular integrated analysis reports and risk assessment results were produced to help the Ocean Conservation Administration strengthen its response capacity and safeguard marine environmental safety.

2024 Marine Pollution Monitoring and
Reporting Task Force Project Results
Report

Pilot study on evaluating and analyzing the reduction of fire-related carbon emissions by automatic sprinkler and other fire extinguishing equipment - A case study of factory fires



According to the UN SDGs, mitigating climate change requires reducing greenhouse gas emissions, and fires are a major source of carbon emissions. In 2019, carbon emissions from fires reached 7.8 billion tons, a 26% increase compared with 2018, accounting for one-fifth of global combustion-related carbon emissions. In Taiwan, from 2020 to 2021, there were an average of 1.38 factory fires per day, making factories the second most frequent fire site. Factory fires are difficult to control, and most factories lack automatic sprinkler systems, increasing risk. This project analyzes the effectiveness of automatic sprinkler systems in suppressing fires in the early stages and reducing CO₂ emissions, evaluating their feasibility in lowering fire-related carbon emissions and environmental damage. It also proposes methods for calculating carbon emissions and carbon taxes to assist industry in addressing sustainability risks arising from fires and to promote talent cultivation and equipment deployment, thereby strengthening environmental management and sustainable development in factories.

∴ Number of Government Sustainability-Related Projects

Number of domestic and overseas government projects undertaken	Number of domestic and overseas government sustainability-related projects undertaken
 130	 36

∴ Number of government projects undertaken by NKUST in the past 3 years

Type	2024	2023	2022
Total Number of Government Project Contracts Undertaken	130	123	110
The Total Number of Projects Related to Sustainability	36	25	25
Proportion of Sustainable Related Project Cases	28%	20%	23%

3.5.5

Marine Characteristic Research and Collaboration Plan

Research on Ocean Characteristics, Focusing on Sustainable Development and Environmental Economics

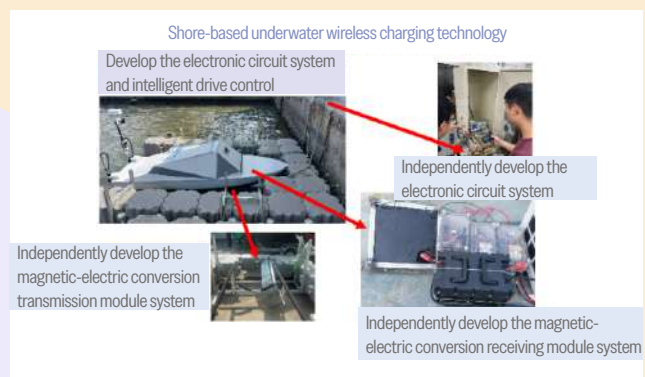
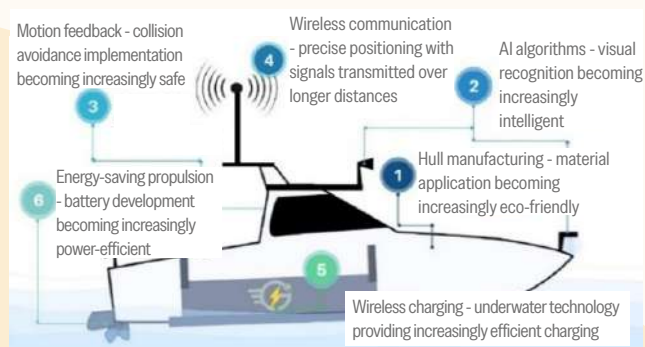
To develop research in key marine-featured areas, the University established the "Marine Feature Sustainable Development Research Grant Scheme" to encourage faculty to continue implementing sustainability research projects. In addition, for the purpose of cultivating new faculty members, marine scientific research will be aligned with global trends in critical environmental and economic development. 'Sustainable development' is designated as a key research topic, with research themes focusing on 'cross-disciplinary expertise', 'THE Sustainable Development Goals (SDGs 14)', 'marine research related to SDGs', and 'ESG marine-related aspects'. This deepens the depth and breadth of marine technology exploration, technical development, and social humanities. Through research findings, NKUST understands the needs of industrial development and brings together technological and application trends. This aims to exert a positive influence and serve as a trendsetter and key driver for sustainable development in society, the nation, and globally. With regard to faculty performance, in 2024, the project published 60 papers in SSCI journals, generated 17 National Science and Technology Council (NSTC) projects (approximately NT\$15.87 million), and secured 11 industry-academia collaboration projects (approximately NT\$10.23 million), demonstrating significant achievements.

Cross-Disciplinary Development of Hydrogen-Powered Unmanned Vessels for Sustainable Marine Technology

In recent years, the rise of unmanned technologies has brought greater efficiency and convenience to various industries. The University has actively invested in unmanned technology in the marine sector and has cross-campus and cross-disciplinary faculty-student teams jointly developing the University's first self-built sustainable unmanned intelligent vessel. Considering green energy and sustainability, the team selected an appropriate hydrogen fuel cell system as the propulsion method and combined it with underwater wireless charging technology to develop a vehicle capable of operating in aquatic environments and achieving the goal of sustainable navigation. When docked or when shore power is available, the vessel can use underwater charging technology to recharge. During operation or in situations without external power, the fuel cell can generate electricity to provide extended range.



Sustainable unmanned intelligent vessel: The "Shine"



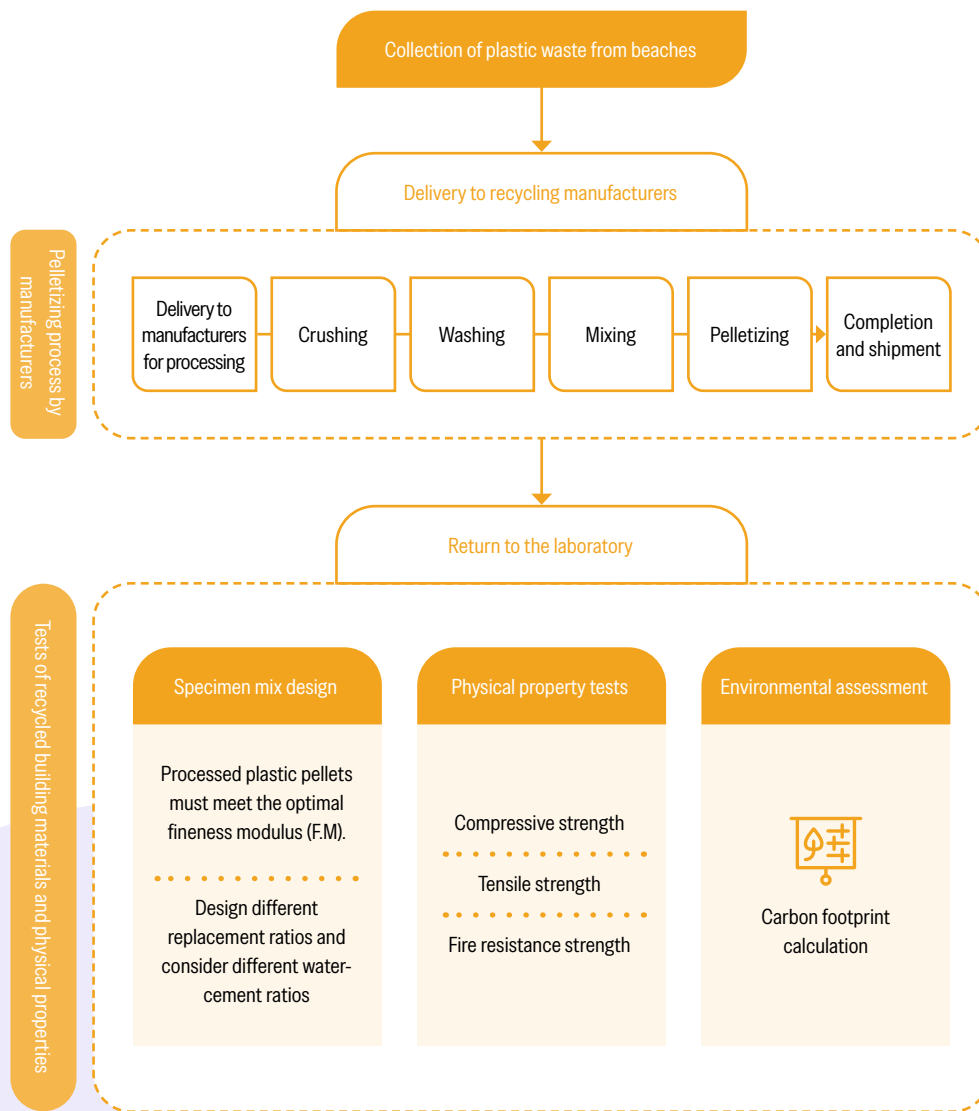
Supporting Marine Innovation Projects to Promote Cross-Disciplinary Student Research Capacity

To encourage student exploration of marine issues, NKUST has approved funding for 5 student research projects with a marine focus. These projects will promote collaboration across campuses and departments. Effectively guide students from non-marine departments to collaborate in teams that combine the marine industry with materials science, green chemistry, renewable energy, environmental protection, and engineering technologies, thereby engaging in cross-disciplinary emerging technologies and stimulating creativity.

Research methodology flowchart for the seawater hydrogen fuel generation project



∴ Technical roadmap for the marine waste reuse project



✚ Marine Feature Sustainable Research Project

To implement the University's marine feature positioning, the Office of Marine Technology Development was established as a dedicated unit. Marine research development is focused on four major axes: "Innovation in Aquaculture and Fisheries Industries", "Marine Green Energy and Environment", "Marine Management and Humanities", and "Marine Engineering and Mechatronics". By integrating the University's strengths in marine technology with other cross-disciplinary expertise to achieve complementary advantages and technological integration, the University jointly develops cooperation strategies and strengthens linkages with industry. Through the potential of academic research and close relationships with industry, the University accelerates the upgrading of marine industry technologies, thereby creating greater industrial value and social benefits.

∴ Results of the Marine Feature Sustainable Research Project over the Past Three Years

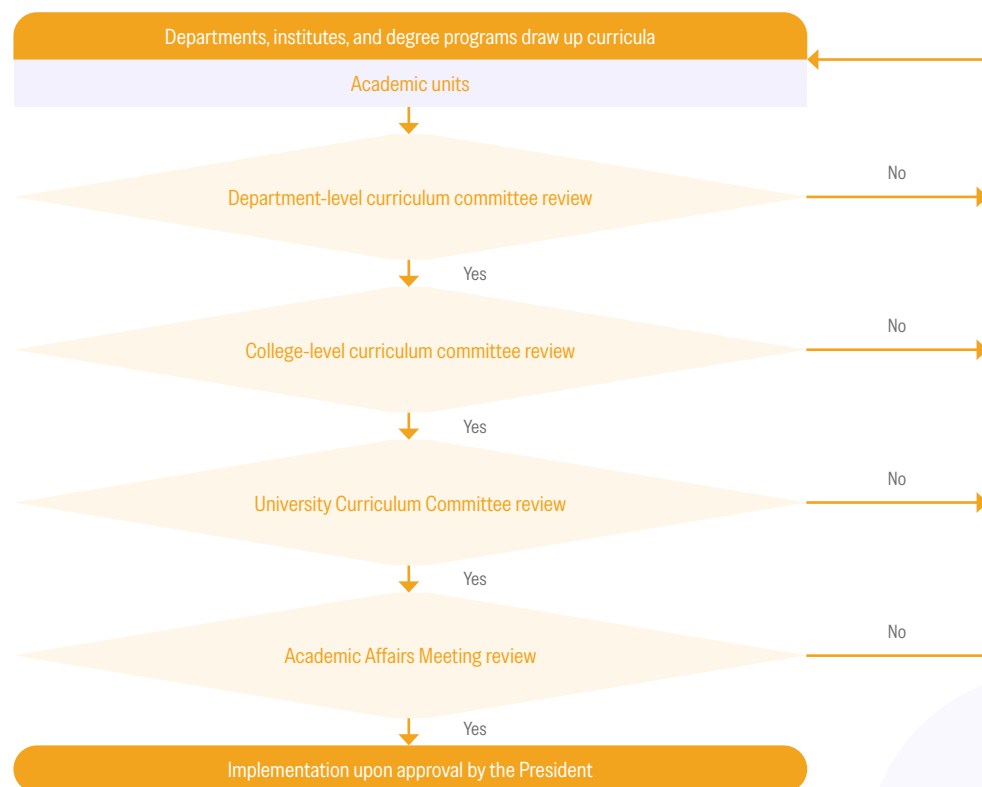
	2022	2023	2024
Amount	NT\$12,250,000	NT\$12,300,000	NT\$13,490,000
Number of approved projects	28	30	32
Number of participating faculty members	38	33	38
Number of participating students	60	72	67
Number of NSTC or Ministry of Education projects in the same year based on this project	8	24	17
(Number of projects, amount)	NT\$10,671,000	NT\$ 26,562,240	NT\$15,870,000
Number of external industry-academia cooperation projects in the same year based on this project	19	6	11
(Number of projects, amount)	NT\$16,742,000	NT\$2,951,794	NT\$10,233,000
Publications in SCI or Top 20% journals based on this project	-	23	40
(Number of submissions, number of publications)	31	44	60
Cross-disciplinary student projects based on this project	19	24	-
(Number of Cases)			
Inviting industry speakers to deliver marine-related lectures or to lead student visits to marine-related government agencies or marine industry enterprises	-	-	32
(Number of sessions)			

3.6

Teaching Quality Assurance

Integrating Teaching Resources and Refining the Curriculum Review Mechanism

NKUST promotes resource integration in teaching, continuously optimizing its teaching system and curriculum design to enable every student to fully realize their potential and achieve comprehensive growth. The following diagram outlines the curriculum development process for each department, program, institute, and degree program. After approval by the relevant curriculum committees at each level, the process culminates in the president's final approval for implementation.



Multi-Level Evaluation Framework to Promote Comprehensive Enhancement of Teaching and Research

To ensure educational quality and promote continuous organizational improvement, the University advances from three levels: "faculty evaluation", "department/institute evaluation", and "institutional evaluation", corresponding to multi-level structures of point (faculty), line (department/institute), plane (college), and body (the entire University), thereby comprehensively enhancing and optimizing teaching and research organizations. In line with the periodic evaluations conducted by the Higher Education Evaluation & Accreditation Council of Taiwan (HEEACT), the University is currently in the third cycle (2023-2025) of institutional evaluation. Each cycle covers a period of three years, so the University undergoes external institutional evaluation approximately every three years.



Establishing a Management and Control Mechanism to Enhance Institutional Quality and Organizational Performance

By building a management and control mechanism for key issues, formulating various evaluation regulations, strengthening administrative support systems, and implementing continuous self-improvement measures, the University gradually enhances its overall quality and capacity in teaching, research, and administration. Through a comprehensive evaluation system and management and control mechanism, the University expects to strengthen the self-positioning of colleges and departments/institutes and thereby promote overall institutional development and organizational performance.

Promoting Department/institute Evaluations to Improve Teaching Quality

- ✦ In April 2024, six departments/institutes underwent evaluation, and all received a rating of "Pass". Details are as follows: the Business Intelligence School (Ph.D. Program in Business Intelligence School, Department of Accounting and Information Systems, Department of Finance and Information, Department of Public Finance and Taxation, Department of Tourism Management, and Department of Intelligent Commerce) completed the ACCSB accreditation conducted by the Chinese Management Association's Management Science Society in April 2024, and all programs passed the evaluation.
- ✦ In March 2024, four departments/institutes underwent evaluation, and all received a rating of "Pass". Details are as follows: the College of Management (Graduate Institute of Science and Technology Law) and the College of Foreign Languages (Department of Japanese, Department of German, and Department of English) completed accreditation by the Taiwan Assessment and Evaluation Association (TWAEE) in March 2024, and all programs passed the evaluation.



Disclosure of
various evaluation
results



Business Intelligence School ACCSB
accreditation certificate



Graduate Institute of Science and Technology
Law received the Accreditation certificate
from the Taiwan Assessment and Evaluation
Association (TWAEE)



Department of English received the
Accreditation certificate from the Taiwan
Assessment and Evaluation Association
(TWAEE)

Special Awards for Outstanding Teaching to Enhance Faculty Teaching Momentum and Sense of Honor

In accordance with the "Regulations for Flexible Salary Incentives for Outstanding Teaching, Counseling and Service Personnel", the University rewards and recognizes faculty members who are deeply engaged in teaching, thereby fostering teaching enthusiasm among all faculty. In Academic Year 2021-2022, 52 faculty members received teaching awards. Starting from Academic Year 2022-2023, awards have been calculated on an academic-year basis and divided into fixed-amount awards for Teaching Practice Research Projects and a point-based system, with a total of 79 award recipients. In Academic Year 2023-2024, 96 faculty members were rewarded, and in Academic Year 2024-2025, 90 faculty members received awards.

Teaching Feedback Survey

The school emphasizes the collection of formative and process-oriented teaching feedback data, which involves mid-term and end-of-term teaching feedback surveys. The mid-term teaching feedback survey incorporates self-reflection questions for students, aiming to comprehend their learning progress and detect any challenges they might face during the learning process. This information is utilized to empower teachers to adapt their teaching content and methods accordingly. The purpose of end-of-term teaching opinion surveys is to understand the effectiveness of faculty teaching and to serve as a reference for improving teaching quality. Calculation formula for response rate = number of valid responses ÷ number of eligible respondents

Number of valid responses = actual number of responses – number of invalid questionnaires; Number of eligible respondents = total course enrollment – number of excluded students

Statistics of Teaching Feedback Survey in the Past 3 Years

	2023-1	2023-2	2022-2	2022-1	2021-2	2021-1
Total Number of Courses	5,205	5,017	4,807	5,038	4,924	5,208
Average Satisfaction Score	4.5	4.5	4.5	4.5	4.5	4.5
Response Rate	79%	52%	75%	75%	79%	81%

Average Satisfaction Score (out of 5)

Relaxing Learning Constraints to Promote Cross-Disciplinary Learning Advantages

The University has abundant learning resources and actively leverages this advantage to transform students' point-based learning into linear or planar cross-disciplinary learning. By reviewing the overall course offerings of each department/institute, the University promotes the relaxation of curriculum requirements in each department, such as adjusting the proportion of required courses, reducing the total number of credits required for graduation, and raising the limit on the number of credits that can be recognized from other departments. These adjustments aim to achieve curriculum deconstruction, flexible learning, and diversified course selection. Developing diverse cross-disciplinary programs: a micro-program mechanism has been added. Each academic unit may plan a 5-9 credit micro-program according to the attributes of its professional courses. In the 2nd semester of Academic Year 2023-2024, four new micro-programs (5-9 credits) were added: Aesthetics Micro-Program, Digital Technology Micro-Program, Innovation Micro-Program, and Entrepreneurship Micro-Program, guiding students to make good use of credits recognized from other departments and to focus on cross-disciplinary learning. Following the relaxation of learning constraints and the development of diverse cross-disciplinary programs in the 2nd semester of Academic Year 2022-2023 and the 1st semester of Academic Year 2023-2024, the number of participants in Academic Year 2023-2024 increased by 723 compared with Academic Year 2022-2023.

Promoting Teaching Enhancement and Innovation-Related Projects

Education is a long-term endeavor that shapes future generations. To enhance quality assurance in teaching, NKUST continuously refines teaching methods and implements a series of initiatives and training programs to support faculty development. The following are relevant achievements:

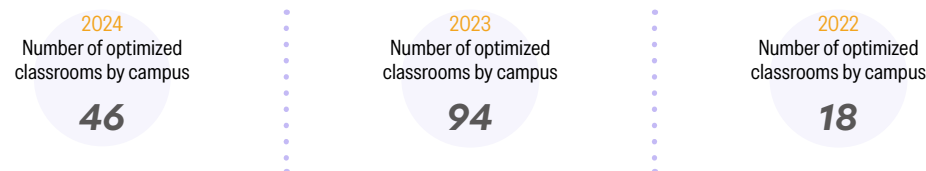
Item	Summary of Contents
Teacher Professional Community	Encourage faculty to form communities for teaching development, practical knowledge, thematic collaboration, and teaching support centers, and to organize sharing sessions, workshops, and other cooperative activities
Innovative Teaching	Provide pilot subsidies for innovative teaching to support creative courses that integrate theory and practice
PBL (Problem-Based Learning and Project-Based Learning)	Strengthen students' self-directed learning and critical thinking skills and encourage faculty to introduce PBL courses
Digital Educational Multimedia	Promote the integration of digital teaching materials into courses and blended teaching, and train faculty in digital teaching competencies
MIAOPU Project	Incorporate design thinking, cross-disciplinary co-preparation, and ESG issues to enhance curriculum innovation and industry linkages
Teacher Instructional Consultation Service	Provide six categories of teaching consulting services, including promotion, innovation, and research related to teaching advancement

Classroom Optimization and Renovation

In 2024, the University completed optimization and renovation of 46 University-owned classrooms, including improvements to classroom space and environment, enhancement and digitization of equipment, and replacement of desks and chairs with more comfortable models.

- ✦ **Space safety optimization:** Replace old ceiling fans, lighting fixtures, curtains, glass whiteboards, and other items; repaint all classroom walls; and replace floor tiles as needed.
- ✦ **Digitization and energy-saving of equipment:** Install environmental control systems and optimize teaching equipment. Classroom equipment can be turned on and off with a single button, with wireless projection and multi-screen sharing. Laser solid-state projectors, infrared microphones, and other teaching devices have been replaced or upgraded to improve the quality of classroom teaching.
- ✦ **Safe and comfortable desks and chairs:** Old desks and chairs have been replaced with separate desk-and-chair sets, providing a more comfortable and stable learning environment for students.

Statistics on the Number of Optimized University-Owned Classrooms Over the Past 3 Years



Ministry of Education Teaching Practice Research Project

The Ministry of Education has initiated the Teaching Practice Research Program in 2017, aiming to enhance the quality of teaching and the school effectiveness. It integrated with the Higher Education SPROUT Project to strengthen the teaching development of schools. NKUST actively supports faculty research by implementing the 'One Incentive, Six Approaches' program. This program includes initiatives such as professional development for teaching, empowerment workshops, pilot grants and incentives, all aimed at encouraging faculty to engage in teaching practice research. In the 2024/2025 academic year of our school, a total of 161 project proposals were submitted, with 63 of them being approved. The approval rate reached 39%. In Academic Year 2023, eight principal investigators implementing Teaching Practice Research Projects were awarded outstanding project honors. NKUST ranked first in the nation for the number of Outstanding Projects awarded in the 2023/2024 academic year.

Statistics of Teaching Practice Research Projects in the Past 3 Academic Years

Item	Academic Year			
	2024	2023	2022	2021
Number of applications	161	137	85	75
Number of approvals	63	66	39	44
Passing rate	39%	48%	45.9%	58%
Highlights/Outstanding Achievements	-	8	7	5

3.7

Academic and Ethical Integrity

3.7.1

Academic Integrity



Statistics on passing rates for academic ethics courses over the past 3 years are shown in the table below:

To ensure that faculty and researchers possess the correct ethical awareness and attitudes required for academic research, to cultivate integrity in academic ethics, to deepen academic ethics education, and to establish objective and impartial procedures for handling violations of academic ethics, the University has formed an Academic Ethics Office as a first-level administrative task-force unit. The University has formulated the "Guidelines for the Establishment and Operation of the Academic Ethics Office", the "Guidelines for Reviewing Violations of Academic Ethics by Faculty and Researchers", and the "Guidelines for Implementing Academic Ethics Education for Faculty and Researchers". Each year, the University regularly organizes and promotes academic ethics activities and encourages teaching and research personnel to participate in academic ethics-related courses, thereby enhancing their understanding of academic integrity and promoting compliance with academic ethics standards.

In addition, to ensure that students possess the correct ethical awareness and attitudes necessary for conducting research, the University has formulated the "Guidelines for Implementing Academic Research Ethics Education". Students are required to take designated courses via the Center for Taiwan Academic Research Ethics Education. Students who have already completed relevant courses must submit proof of course completion and may be exempted from retaking the course upon approval by their department (college, institute, or degree program). Departments (colleges, institutes, or degree programs) may also, according to their characteristics and needs, set up academic research ethics education courses or alternative measures, provided that they meet the required content of academic ethics education.

Students must comply with NKUST's "Implementation Measures for Enhancing the Quality of Degree Theses and Dissertations", and the Office of Academic Affairs has also established an Academic Ethics section on [its website](#).

Statistics of academic ethics course pass rates for graduate students at NKUST in the past 3 years

Unit: Persons

	2024/2025 Academic Year		2023/2024 Academic Year		2022/2023 Academic Year		2021/2022 Academic Year	
	Number of participants	Number of approvals	Number of participants	Number of approvals	Number of participants	Number of approvals	Number of participants	Number of approvals
Master's student	1,648	1,648	1,706	1,706	1,655	1,655	1,604	1,604
Ph.D. student	87	87	68	68	84	84	68	68

Key Statistics on Academic Ethics Cases in 2024

Number of Cases	Closed	Open Cases
2	2	0

Remark: One faculty case was investigated and found not to involve any violation of academic ethics. The Office of Academic Affairs handled one student academic ethics case, which was found to involve a violation of academic ethics. The University will continue to strengthen the promotion of academic ethics regulations.

3.7.2

Ethical Integrity

In order to uphold the principles of integrity, fairness, and the rule of law, our university adheres to the 'Ethnical Guidelines for Civil Servants' and 'The Ethical Standards for Integrity of Civil Servants and Teachers in the Ministry of Education and its Affiliated Institutions and Schools'. If any personnel violate these regulations and the violation is confirmed through verification, they will be subject to disciplinary action in accordance with the relevant laws. If there is any criminal liability involved, it will be transferred to the judicial authorities for handling. The Personnel Department, in accordance with the Ministry of Education's directive, disseminated the 'Ethics Guidelines for Civil Servants' and the 'Integrity Ethics Code for Civil Servants and Teachers of the Ministry of Education and Its Affiliated Institutions and Schools'. This was accomplished through an official email announcement to all faculty, staff, and employees of NKUST. The Secretariat concurrently undertakes government ethics tasks and cooperates with investigations by judicial and investigative agencies by assisting in providing and compiling relevant documents and responses.

Integrity Promotion Lectures

To strengthen faculty and staff awareness of legal compliance in the use of subsidies and commissioned project funds, NKUST held a legal education seminar on March 8, 2024, inviting Judge Yang, Chih-Shou to speak on "Legal Risks in Reimbursement of Subsidies and Commissioned Project Funds and Government Procurement", with a total of 218 participants.



Poster on the Boundaries Between Self-Plagiarism, Text Reuse, and the Use of ChatGPT

3.8

Career Counseling and Graduate Outcomes

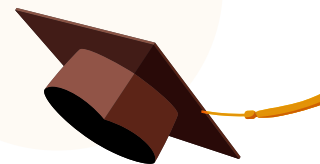
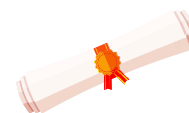
3.8.1

Career Exploration and Counseling

Offer career counseling courses and provide a variety of employment matching opportunities

To assist students in planning their careers and expanding employment opportunities, the University has designed a variety of counseling measures, including career lectures, recruitment briefings, corporate visits, and on-campus job fairs, in its efforts to build a comprehensive career counseling platform. Related activities are summarized as follows:

Item	Summary of Contents
 Career Lecture	Combine career assessment tools such as PPSS, UCAN, and CPAS with industry sharing to help students with self-exploration and career planning, thereby enhancing self-awareness and employment confidence
 Job Recruitment Information Seminar	Invite enterprises to campus to host briefings, providing information on corporate culture and job openings and helping students grasp workplace trends
 Corporate Visits	Coordinate with enterprises to arrange company visits and deepen students' understanding of industries and workplace environments
 Campus Employment Expo	Organize both physical and virtual job fairs to facilitate matching between students and employers



Deepening internship experience through the IBMP-Tech educational model



Career Guidance and Counseling Lecture



Largan Precision Company Limited recruitment briefing session



TSMC pre-employment recruitment briefing session



2024 Campus Employment Expo (Jiangong Campus)



2024 Campus Employment Expo (First Campus)

Promoting workplace internship programs, collaborating with enterprises to jointly cultivate talents.

To strengthen students' professional practical abilities, the University, based on the curriculum planning of each department, promotes diverse workplace internship courses, including semester internships, year-long internships, summer/winter internships, and project-based internship courses. These opportunities help students apply what they learn in the classroom to practical settings, accumulate valuable workplace experience, and realize the goal of joint talent cultivation between academia and industry and smooth transition to the job market. The main schemes are summarized as follows:

Item	Summary of Contents
Enterprises visiting campus to promote internship opportunities	Conduct on-site visits to internship institutions, emphasize occupational safety and labor conditions, and organize briefings and interviews to strengthen matching and internship quality Implementation Status: A total of 43 internship briefings and 14 internship interviews were held
JOBflix online summer upskilling activities	Offer cross-disciplinary and international career online lectures to improve students' résumé writing and workplace readiness Implementation Status: Nine lectures were held, attracting more than 635 participants
Creative competition for internship reflections and "snapshots of internship moments" activities	Encourage students to share their internship experiences, and strengthen internship reflection and knowledge transfer through competitions and activities Implementation Status: Twelve students received awards in the Internship Reflection Creative Competition, and 339 entries were submitted for the Internship Snapshot activity
Internship Institution Satisfaction Survey	Survey student and host institution satisfaction to demonstrate internship outcomes and industry recognition Implementation Status: Student satisfaction: 4.58 (91.6%); institution satisfaction: 4.37 (87.4%); 93.5% of institutions were willing to offer employment; 98.1% were willing to continue providing internship openings

NKUST Intern Life



Department of Seafood Science
Chen Hsin-Hung, Kuo Yuan Ye
Foods Co., Ltd.



Department of Construction
Engineering
Yuan Yu-Hsiang, Feng Yu
Construction Co., Ltd.



Department of Safety, Health and
Environmental Engineering
Tu Chih-Chun, Panasonic Taiwan Co., Ltd.



Department of Electrical
Engineering
Shih Cheng-Yu, Siemens Gamesa
Renewable Energy S.A., SGRE

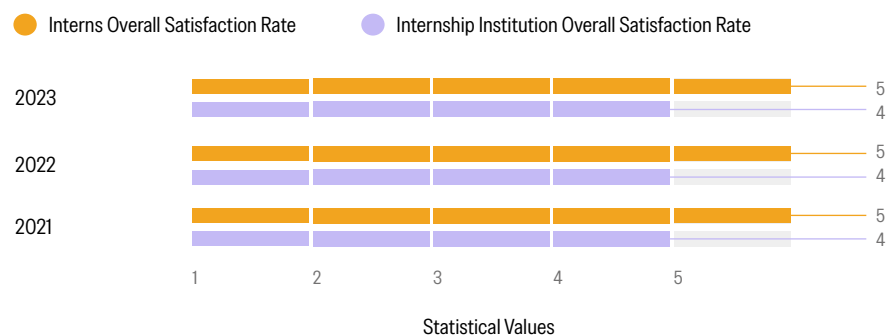
∴ Career Activities Implementation Status in the Past Three Years

Item		2024	2023	2022
 Career Lecture	Session	24	3	41
	Applicant	1,159	960	1,220
 Job Recruitment Information Seminar	Session	23	24	36
	Applicant	1,689	2,201	2,262
 Corporate Visits	Session	9	15	8
	Applicant	363	789	226
 Campus Employment Expo	Session	5	5	5
	Applicant	11,441	15,619	12,073

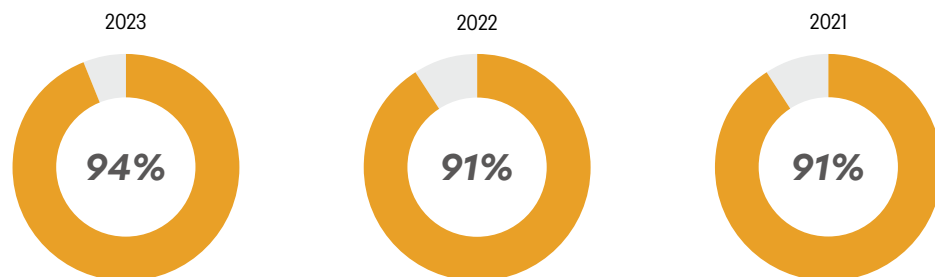
∴ Number of Internships in the Past Three Academic Years

Academic Year	Internship	Academic Internship	Summer/Winter Internships	Internship Project	Total
2023	647	271	564	149	1,631
2022	618	224	694	156	1,692
2011	618	224	694	156	1,692

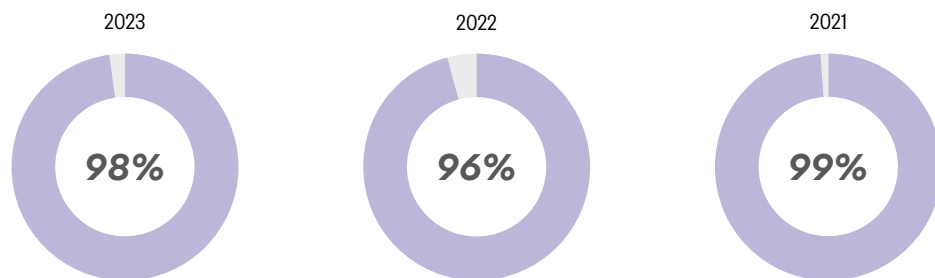
∴ Satisfaction Survey of Interns and Internship Institutions for the Past Three Academic Years



∴ The rate of internship organizations Willing to retain interns (%)



∴ Retention rate of internship positions offered by organizations (%)



3.8.2 Employment Performance of Graduates



Graduate employment survey

In line with Ministry of Education policies, the University has developed an online "Graduate Destination Tracking Survey" to collect feedback on alumni status. The aim is to use alumni feedback as a reference for future educational improvement, institutional development, departmental curriculum planning, the University's sustainable operations, and policymaking related to higher education talent cultivation. Survey results are managed and processed in accordance with the Personal Data Protection Act. The Alumni Center conducts the survey each year from July to October through multiple channels, including email, telephone interviews, and departmental promotion, to collect information on the development of the University's graduates. The average employment rate is 51%. Due to the survey period overlapping with summer vacation and graduation season, some graduates are still planning or exploring their future paths.



Employer Satisfaction Survey

Implement a Graduate Tracking System to Monitor Alumni Employment Trends

To understand the workplace performance of graduates, the University conducts the "Survey on Employers' Evaluation of Graduates' Workplace Competencies". From March to July, the survey is distributed through multiple channels, including email (to companies hosting interns and firms recruiting through the 104 Corporation), social media, and the University's job fairs, to collect feedback from employers on graduates' workplace abilities. The survey assesses employers' satisfaction with graduates' performance in 12 core competencies: professional knowledge and skills, innovative thinking, use of information technology, willingness to learn, adaptability, problem-solving, stress resistance and stability, global outlook and foreign language proficiency, and teamwork, among others. In 2024, the overall average score for workplace employability was above 4.2 out of 5, indicating that employers highly recognize the professional performance and comprehensive abilities of the University's graduates.



Chapter Highlights

The graduation rate of our school in 2024 is

86%

the graduation rate for the current year is

84%

The overall workplace performance of our university's graduates has reached a score of

4.2

out of 5

according to feedback from employers.

Chapter 4

Social Inclusion and Engagement



4.1 University Social Responsibility	101
4.2 International Exchange	104
4.3 Resource Sharing	105
4.4 Accessible Campus	108
4.5 Historical Buildings and Open Spaces	108

4.1

University Social Responsibility

NKUST leverages the social influence of universities, integrates resources on campus, and collaborates with industries through educational outreach, volunteer services, community care visits, and exchanges. We are committed to engaging in ecological issues and elderly affairs in the surrounding communities. Additionally, community residents can express their opinions at any time through the university's suggestion system and the official email channels of various departments, contributing to the building of a mutually beneficial and prosperous society. The USR (University Social Responsibility) projects promoted by the University echo the UN SDGs and demonstrate higher education's commitment to putting sustainability concepts into practice. For the alignment between each USR project and the SDGs, please refer to "Table - Mapping of USR Projects to SDGs" on page 126.

4.1.1

Project Positioning

University Social Responsibility Program

- Starting from "local needs" and "talent development", faculty and students engage in processes of insight, interpretation, and participation in real-world problems, integrating relevant knowledge, technologies, and resources to focus on social issues and practice sustainable development. The University develops systematic formal curricula and innovative teaching designs, advances talent cultivation mechanisms to meet societal needs, implements university social responsibility in a sustainable manner, and helps local communities develop innovative approaches. The University is committed to combining its strengths in marine expertise, entrepreneurial innovation, and applied skills to serve regional industrial clusters and community development.
- Under the Ministry of Education's third phase of the USR program, the University secured approval for a total of five USR projects, with total subsidies reaching NT\$32.8 million. This achievement reflects the University's longstanding efforts in local engagement and cross-college integration. According to Ministry of Education announcements, only 11 universities and colleges nationwide were approved for five USR projects in a single round under the third phase. NKUST is one of them. This result highlights the University's active role and impact in advancing university social responsibility, promoting local revitalization, and fostering sustainable development, and it demonstrates the University's determination and capability to fulfill its social responsibilities and realize sustainable values.

University Social Responsibility Hub (USR HUB)

- Since 2017, the University has formulated the "Pilot Subsidy Guidelines for University Social Responsibility Practice Projects" and revised these guidelines in 2024, encouraging faculty and students to actively participate in exchange and collaboration with local communities and industries, to identify key regional development issues, and to integrate resources across units. Through concrete actions, the University cultivates the talent needed for regional development, drives innovation and technological upgrading in local industries, reduces urban-rural disparities in educational development, and creates mutual benefit and shared prosperity among faculty, students, and local residents, thereby fulfilling its university social responsibility.
- The University promotes university social responsibility through the following strategies: practicing social responsibility and encouraging faculty and student participation; diversifying teaching innovation to cultivate distinctive talent; deepening field engagement and valuing feedback; expanding experience and outcomes to promote exchange and dialogue; and aligning with sustainable development to diffuse outcomes internationally. To enhance social impact, the University actively supports small-scale internal USR faculty-student teams in social responsibility practice. To enable faculty and students to engage more broadly with societal issues, enrich course development, and effectively align with USR strategies, the University guides students to link their professional competencies with local sustainability issues and promotes multiple support measures to foster regional development, encouraging participation by students and faculty. In 2024, a total of seven USR HUB teams were supported, with more than NT\$3.2 million in subsidies, and a USR credit program in four major fields—creative arts, social enterprises, environment, and audiovisual media—was promoted to cultivate USR talent with both narrative capacity and practical competence.

∴ University Social Responsibility (USR) Program Subsidies

Project Name	Execution Site	SDGs	Subsidy per Year
You Can Do It! Kaohsiung Mountain and Urban Core Sustainability Blueprint	Namasha and Meinong, Kaohsiung	1 NO POVERTY, 11 SUSTAINABLE CITIES AND COMMUNITIES, 13 CLIMATE ACTION	8 million
Bamboo Dream Learning + Active Leisure in Garden Fields	Jhutian, Pingtung	8 DECENT WORK AND ECONOMIC GROWTH, 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE, 11 SUSTAINABLE CITIES AND COMMUNITIES	2.5 million
Coastal Placemaking and Social Innovation - Kaohsiung Fishing Village Project	Yong'an and Mituo, Kaohsiung	2 ZERO HUNGER, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 14 LIFE BELOW WATER	7.5 million
Carbon-Free Ideal - Net-Zero in Ciaotou/Nanzih	Nanzih and Qiaotou, Kaohsiung	11 SUSTAINABLE CITIES AND COMMUNITIES, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION	6.8 million
Good Fish Next Door Project	Linbian and Jiadong, Pingtung; Kochi and Nagano Prefecture, Japan	7 AFFORDABLE AND CLEAN ENERGY, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 14 LIFE BELOW WATER	8 million

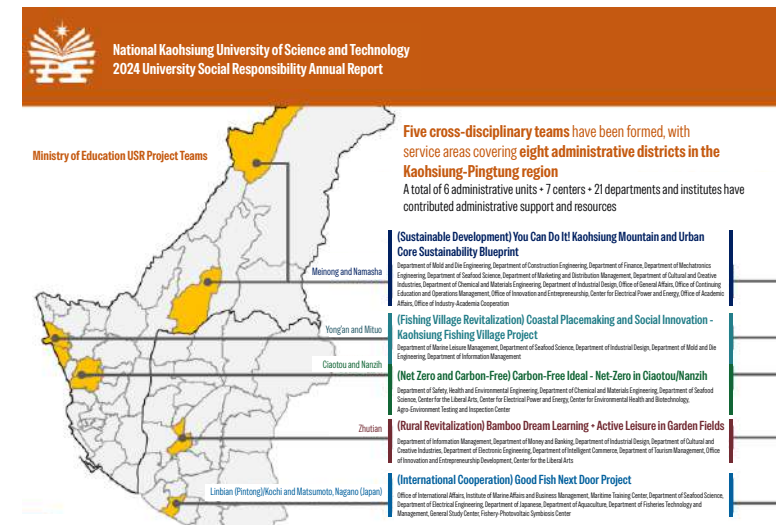
4.1 University Social Responsibility Hub (USR HUB) Subsidies

Project Name	Execution Site	SDGs	Subsidy per Year
Alishan Railway Tourism Development - Rooted and Co-existing with Local Culture in Luku	Zhuqi, Chiayi	11 SUSTAINABLE CITIES AND COMMUNITIES	400 thousand
Green Xiaolin: Revitalizing the Taivoan Culture	Shanlin, Kaohsiung	11 SUSTAINABLE CITIES AND COMMUNITIES	400 thousand
Haishan Youth - Digital Learning Partner Instruction and Camp	Dongshi, Chiayi	4 QUALITY EDUCATION	400 thousand
Dancing in the New Garden: Linking Talent in the Kaohsiung-Pingtung Aquatic Industry Project	Sinyuan, Pingtung; Mituo, Kaohsiung	8 DECENT WORK AND ECONOMIC GROWTH	500 thousand
Participatory Social Design Practice: Xiao Liuqiu Environmental Education	Liuqiu, Pingtung	11 SUSTAINABLE CITIES AND COMMUNITIES	500 thousand
Grand Southern Industrial Smart Net-Zero Initiative	Nanzih, Kaohsiung; Yongkang, Tainan	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	500 thousand
Smart Aging and Intelligent Care	Hospitals in Kaohsiung	3 GOOD HEALTH AND WELL-BEING	500 thousand

4.1.2

Representative Case Illustration

The University's teams implementing the Ministry of Education USR projects provide services across eight administrative districts in the Kaohsiung-Pingtung region, including the "You Can Do It! Kaohsiung Mountain and Urban Core Sustainability Blueprint" project in the remote Namasia area of Kaohsiung. For details, please refer to the University Social Responsibility Annual Report. The mapping between the SDGs and USR projects is presented in the Appendix (page 126).



NKUST's Social
Responsibility Annual
Report



NKUST's "Coastal Placemaking and Social Innovation - Kaohsiung Fishing Village Project" focuses its main implementation sites on coastal fishing villages along Provincial Highway 17. Over the past seven years, the project has developed multiple bestselling products for local communities. In 2025, it collaborated with Topmarge Pet Food Co., Ltd. to launch a pet food product, "Omiyage", which was brought to market in April. From left to right in the photo are NKUST Vice President and Distinguished Professor Hsieh, Shu-Ling of the Department of Seafood Science; Co-Principal Investigator Professor Hou, Chih-Yao of the Department of Seafood Science; and Principal Investigator Associate Professor Ting, Kuo-Huan of the Department of Marine Leisure Management.

I. "Coastal Placemaking and Social Innovation - Kaohsiung Fishing Village Project"

Local Sustainability

The team has begun to shift to a supporting role, with the local community autonomously organizing the "Breeze from the Sea" event. The project team provides suggestions for optimizing activities and enhancing local festivals. While offering learning opportunities for students, the team is also committed to deepening and showcasing the unique cultural identity of fishing villages. This includes transforming local bases and incorporating environmental issues into practical actions, further demonstrating the diverse future value of fishing villages.

Talent Development

In the current year, 26 courses were offered, with more than 1,000 students enrolled, and the cumulative impact on teachers and students in compulsory education as well as field partners reached approximately 1,500 person-times. The team also coached local aquaculture youth in applying for the Youth Return Program and assisted Nan'an Elementary School in applying for an ocean conservation project from the Ocean Conservation Administration. By introducing external resources, local partners are able to cultivate collaborative capabilities and ensure that mechanisms for local sustainability and talent development can be implemented on a long-term basis.

Industrial Innovation

During the project implementation period, the team communicated with local stakeholders through community forums and identified practical issues in the field, including enhancing "competitiveness of aquatic products" and "value-added field optimization". Relying on the University's R&D capacity, the team sought solutions to these issues. Faculty members of the Department of Seafood Science developed multiple processed aquatic products during the period. Products developed this year, such as "pet food", "crispy fish cakes", and "grouper energy soup", are all centered on the project's core theme of "coastal regional revitalization" and emphasize the spirit of circular reuse. Fish waste from processing is converted into fishmeal and then further processed into products, thereby embodying the spirit of the SDGs.

Promotion of Fishery and Food Knowledge and Curriculum

Taking Nan'an Elementary School in Mituo District as an example, this project trains elementary school teachers to become seed teachers for fishery and food education. By integrating local milkfish aquaculture culture, capture fisheries at Mituo Fishing Harbor, and marine tourism resources along the coastal promenade, a distinctive fishery and food curriculum unique to Nan'an Elementary School has been created. These teachers will serve as leaders in promoting fishery and food education, not only incorporating fishery and food education into school-based curricula but also participating in the promotion of related university courses, thereby forming a comprehensive training system. They gain in-depth understanding of the production processes, quality standards, and food safety knowledge related to aquatic food products and further integrate these concepts into their teaching so that students can benefit from food safety education while engaging in fishery and food education.

II. "You Can Do It! Kaohsiung Mountain and Urban Core Sustainability Blueprint"

Using cloud technology to deepen autonomous disaster prevention in indigenous communities

In Maia Village and Takanua Village in Namasia District, Kaohsiung City, as well as Minsheng Elementary School, the project team prepared environmental disaster potential investigation reports and year-round disaster prevention monitoring reports. The "Cloud-Based Disaster Prevention Monitoring" team conducted investigations and assessments of geological disaster potential and monitoring, and installed "electronic inclinometers" using an Internet of Things concept. Through cloud-based monitoring, the system immediately presents the ground stability status of structures and provides first-hand disaster early-warning functions.

Development of Specialty Products and Themed Itineraries in the Meinong Area

The team addressed issues related to agricultural processing technology and commercialization in Meinong. Through market survey data, the team explored the commercial value and innovation potential of processed agricultural products and identified "white jade radish" and "No. 147 rice" as two key local agricultural specialties. The team successfully developed specialty agricultural products such as white jade radish seasoning and No. 147 rice crackers, creating unique market characteristics and value. Quality will continue to be iteratively improved and branding further developed.

III. Taking "Good Fish Next Door Project" as an example

Friendly Smart Aquaculture Counseling

Smart Aquaculture App system development: Introduced Internet of Things technology to establish water quality detection and sampling devices and offered courses to cultivate technology-based aquaculture professionals. The Smart Aquaculture App system achieves over 95% accuracy in identifying grouper and provides an effective management model for aquaculture farmers. Promotion of Fishery-Photovoltaic Symbiosis Technology: Promoted green, environmentally friendly aquaculture technology, provided counseling to 120 local operators, and signed memorandums of cooperation, thereby reducing carbon emissions by 1,254 metric tons. Promotion of Eco-Friendly Aquaculture Technology: Through the promotion of drug-free, eco-friendly aquaculture technology, fishers reduced medication frequency by 38% and water exchange volume by 25%, effectively lowering aquaculture costs.

International Social Practice Linkages

Taiwan-Japan Exchange Workshops: The University co-organized winter and summer exchange workshops with partner institutions in Japan. By investigating local issues, students from Taiwan and Japan jointly proposed ideas and suggestions for regional revitalization, enhancing students' international mobility and local practice capabilities. A total of 50 students from different countries participated. International Co-Prosperity - Local Care Practice Competition: Through this competition, the University promotes regional revitalization and builds international social linkages. Participating teams expanded from Taiwan and Japan in 2023 to Taiwan, Japan, and Indonesia in 2024, and the number of teams increased from 10 to 19. The competition impacted 20 local community units, such as schools, community associations, and non-profit organizations.

4.2

International Exchange

Promoting Bilingual Learning and an Internationalized Environment

To promote bilingual and diverse learning, and to expand students' international perspectives and international mobility, NKUST implements programs designed to stimulate language learning motivation and provide subsidies for short-term overseas study, creating a supportive learning environment for an internationalized bilingual university.

Deepening Overseas Internships and Multilateral Exchange

NKUST actively promotes overseas internships, encouraging students to participate in international placements, strengthening international academic exchange and cooperation by signing agreements with various sister schools and conducting multilateral exchange activities. Through initiatives like 'Learning to Soar' and 'Building Dreams in the Ocean of Learning,' the school promotes professional development programs. For instance, an all-English learning camp in collaboration with a sister school in the Philippines combines English language learning with cultural experiences. Language proficiency assessments are conducted to evaluate student learning outcomes.

Statistics on International Exchange Activities

Unit: persons

Categories of International Exchange	2024	2023	2022
Exchange students (outbound)	176	119	42
Exchange students (inbound)	34	22	3
NKUST students going-abroad	448	567	195
NKUST faculty going-abroad	758	697	19
Double degree program (outbound)	25	22	18
Double degree program (inbound)	2	2	1
Overseas students visits	51	75	167
Overseas scholars visit	34	52	12



2024 NKUST SOAR Study Abroad English Camp - LCIC, the Philippines

Exchange Students and Double Degree Programs (Outbound and Inbound)

The University continues to actively promote international exchange and overseas learning opportunities, encouraging students to expand their global perspectives and cross-cultural understanding. Through various formats such as sister-school cooperation, overseas study programs, short-term exchanges, dual-degree programs, and overseas internships, students are given opportunities to study and engage in cultural exchange at universities in Asia, Europe, the Americas, and other regions. In recent years, the University has established partnerships with more than 100 overseas universities, and the number of participating students has increased year by year, covering fields such as engineering, management, humanities, design, and maritime studies. Students have demonstrated strong professional and communication abilities on the international stage, achieving fruitful outcomes. These efforts not only enhance students' international competitiveness but also lay a solid foundation for the University's internationalization. The main results are summarized as follows:

Item	Summary of Contents	Implementation Status
Overseas Exchange and Dual-Degree Programs	Students participate in overseas exchange and dual-degree programs to broaden their international learning	A total of 176 exchange students and 25 dual-degree students went abroad, mainly to Germany, Japan, the United States, France, and South Korea
Inbound Exchange and Dual-Degree Students	The University receives international students for study and research	A total of 34 inbound exchange students and 2 dual-degree students were received, from countries including Germany, Japan, Austria, and China
International Exchange Activities	Enhancing students' international mobility and cultural exchange	A total of 411 person-times participated in international learning activities, including: 1. International short-term camps and conferences: 217 person-times 2. English Enhancement Camp: 194 participants
Overseas Internships	Expanding international workplace experience and competency development	A total of 61 students undertook overseas internships (mainly in Japan, Australia, and Southeast Asia)
Inbound Students and Short-Term Exchanges	International camps and immersion/exchange programs	The University organized collaborative camps with Universiti Tunku Abdul Rahman in Malaysia, the Taiwan Experience Education Program (TEEP) for outstanding global youth, and the International Internship Pilot Program (IIPP) for foreign high-level talent in Taiwan, recruiting a total of 28 participants
International Buddy System	Helping incoming international freshmen adapt to campus life	A total of 54 international buddies were recruited and trained

4.3

Resource Sharing

4.3.1

Library Resources



Expanding Shared Library Resources and Promoting Smart Borrowing and Cross-Campus Services

NKUST's library is available for use by students and faculty, as well as members of the public, who can obtain temporary reading passes upon presenting valid identification. These passes must be returned when leaving the library. To achieve the goal of Kaohsiung Think Tank, we sign cooperation agreements with local R&D institutions and enterprises to provide virtual library cards that enable them to access library resources. Readers can use the system to reserve books from other campuses and utilize the school's official vehicle for transportation, saving commuting time and reducing carbon emissions.

Strengthening Digital Resources and Interlibrary Cooperation to Build a "Library Without Walls"

The library subscribes to or purchases databases and e-books annually, promoting online usage. Through the Nationwide Document Delivery Service (NDDS) and the Southern Region Library Resource Sharing Platform, we offer interlibrary cooperation service, including 'Interlibrary Borrow-Returning Service' and 'Virtual Library Card Service,' allowing readers to conveniently access library resources from multiple institutions from home or anywhere else.

Implementing Energy Conservation and Resource Circulation to Fulfill the Concept of Sustainable Reading.

In terms of energy efficiency, Yanchao Library employs motion sensors to control lighting and uses additional sensors near windows, effectively conserving energy. The on-campus water recycling system uses reclaimed water for toilet flushing, effectively promoting water conservation. Furthermore, the libraries at the Yanchao and Nanzih Campuses have installed solar panels to generate renewable energy and reduce electricity expenses. To respond to the SDGs and promote the concept of resource reuse, the University has set up a "Second-hand Book Exchange Corner", encouraging readers to recirculate idle books and extend the lifespan of library resources. Furthermore, the University regularly organizes "SDGs-Themed Book Exhibitions (physical and e-books)". By showcasing SDGs-themed books, readers are guided to pay attention to global issues such as the environment, education, gender equality, and sustainable cities, deepening their understanding of and participation in sustainable development. Use of e-reading resources also helps reduce the carbon footprint associated with printing physical books.



Second-hand Book Exchange Corner



Statistics of Collection of NKUST's Library

Unit: Book

Resource Type	Chinese	Foreign Language	Total
Printed books	650,698	170,820	821,518
E-books	159,398	1,097,767	1,257,165
Print journals	4,466	3,113	7,579
Bound journals	66,237	46,099	112,336
Electronic journals	10,878	40,614	51,492
Database	208	217	425
Non-book materials	62,750	15,622	78,372

Performance of Library-Related Activities

Sustainable Library-Related Activities	Session	Number of Books Given Away
Second-hand Book Exchange Corner	Permanent feature	966
SDGs-Themed Book Exhibitions	5	-

4.3.2

Artistic and Cultural-related Activities



Thematic Art Extravaganza: A Profound Exploration of Art

Upholding the core philosophy of "people-oriented, value co-creation", the University has long been committed to integrating the arts into campus life. To deepen campus aesthetic and cultural literacy, the Arts and Culture Center of the College of General Education launched the "Themed Arts Festival" program in 2023, organizing diverse activities including visual arts, music, theater, lectures, and workshops. The program gradually traces the development of Western art history from the Renaissance to the contemporary era, creating an aesthetic learning environment with both educational value and cultural depth. In 2024, the second Arts Festival was held under the theme "Symphony of Time and Paint: An Artistic Journey from Neoclassicism to Post-Impressionism", exploring the aesthetic context of the period from Neoclassicism to Post-Impressionism.



Opening of the 2nd NKUST Arts Festival



Arts Festival music performances

Anniversary Concert to Build Arts and Culture Momentum

The "Anniversary Concert" has become one of the University's most representative arts events. During the 2024 anniversary celebrations, the University hosted the "NKUST Thanksgiving Concert", inviting Golden Melody Award winner Hsieh Ming-Yu and the Bread Van Band to perform on campus. Centered on nostalgic Taiwanese golden hits, the concert evoked shared cultural memories and intergenerational resonance, creating a warm and grateful atmosphere. The event broadly invited alumni, current faculty and students, and guests from international sister schools to participate, demonstrating intergenerational connection and the spirit of shared arts. Using music as a cultural vehicle, the University promotes the integration of the arts into everyday campus life, reflecting its long-term commitment to arts education and effectively strengthening arts and culture on campus.



Anniversary Thanksgiving Concert

Donation of Works by Japanese Graphic Design Master Fukuda Shigeo

In June 2024, the University received a donation from Tung Fang Design University of precious works by Japanese graphic design master Fukuda Shigeo, including original works, sketches, and manuscripts. The University immediately began inventory and digital archiving and subsequently launched the "Fukuda Shigeo Collection Research Project" to explore the master's life, formative experiences, and artistic essence in depth, establishing comprehensive metadata and an academic research system. In the future, the University plans to organize the "Fukuda Shigeo Special Exhibition", systematically presenting his creative journey and design philosophy. The exhibition will be open to academia and the general public, thereby realizing the three major goals of active use of collections, cultural heritage, and educational outreach, and strengthening the University's multifaceted role in the humanities and international perspectives.



Donation Ceremony

Opening Arts Spaces to Bring Culture to the Public

Since 2019, the University has organized the annual "Young Artist Award" collection competition. Over six editions, a total of 3,647 works have been submitted, making it a prominent visual arts competition platform in Taiwan and an important stage for emerging artists to showcase their talents and engage in dialogue with society. In 2024, to mark the 100th anniversary of the death of Italian composer Giacomo Puccini, the University held the "Tribute to the Master - Puccini Centenary Memorial Exhibition" in the libraries of its five campuses. All exhibitions adopted an open-space design, attracting not only University faculty and students but also students from nearby schools and community members. These exhibitions fully demonstrated the educational and cultural value of public art spaces and showcased the University's achievements in actively promoting cultural sustainability and social inclusion.



Young Artist Award Winning Works



Tribute to the Master - Puccini Centenary Memorial Exhibition

The University continues to deepen campus aesthetic experiences and broaden cultural participation, connecting with society and rooting itself locally with an open and sharing attitude. Through diverse practices such as curation, performances and exhibitions, and revitalization of collections, the University promotes cultural sustainability and the popularization of the arts, demonstrating the active role of higher education in talent cultivation and advancing social inclusion.

∴ NKUST's Investment in Expenditures Related to Arts and Culture

Unit: NT\$

Expenditures Related to Arts and Culture	Relevant Parties	Expenditure Amount
Arts and Culture Expenditures	College of General Education	19,841,446
Campus Installation Art	General Affairs Department	19,279,154
Total		39,120,600

4.4

Accessible Campus

Barrier-free facilities
maps of each campus

NKUST has designed all newly constructed buildings to include accessibility features, in accordance with the latest regulations. In 2024, the University completed improvements to barrier-free facilities on the Jiangong and Yanchao campuses, investing NT\$8.99 million. The works included parking spaces (signage), outdoor passageways, evacuation floor exits, ramps, handrails, and related items. Renovation of a total of 18 restrooms on the Jiangong, Nanzih, and First campuses, as well as one gender-friendly restroom, is being carried out in stages, with total project costs estimated at approximately NT\$19.2 million. In addition, a barrier-free elevator for the administrative building on the Cijin Campus is currently in the design phase, with an investment of NT\$12.8 million and expected completion in 2026. After gradually improving and adding NKUST's barrier-free facilities and equipment, they can facilitate the passage and daily use of teachers and students and provide a more comprehensive campus learning environment and living space, supporting the learning needs of those with disabilities. The elevator upgrades not only enhance comfort, aesthetics, reliability, and safety, but also reduce the regular maintenance costs and mitigate social resource waste. Barrier-free facilities maps of each campus are available for viewing on the school website homepage.



4.5

Historical Buildings and Open Spaces

4.5.1

Preservation and Revitalization of University Historical Buildings

The Northern Building of the Jiangong Campus (formerly the Northern Teaching Building of Kaohsiung Industrial Junior College) is a three-story reinforced concrete teaching building. It was completed in October 1965 and was the first-generation school building constructed at the time of the founding of Kaohsiung Industrial Junior College, one of the predecessors of National Kaohsiung University of Science and Technology before the upgrading of National Kaohsiung University of Applied Sciences. On 8 March 2021, due to the fact that "Kaohsiung Industrial Junior College has been an important cradle for training engineering and technical personnel in Taiwan, with considerable historical and cultural significance. The building features reversed beams and cantilever plates, creating a light and slender balcony façade. This uncommon construction method at the time reflects distinctive stylistic features of the era", and the building was officially registered as a historic building by the Kaohsiung City Government under Cultural Heritage Letter No. 11030445001.

To promote the revitalization and utilization of space in the Northern Building, preliminary plans call for reflecting its historical significance by incorporating functions such as the University History Museum and arts and cultural exhibition spaces, restoring its simple original appearance and endowing it with new spatial functions. In accordance with the Cultural Heritage Preservation Act, the University has successively completed investigation and research and prepared a restoration and adaptive reuse plan. Restoration design proposals for the historic building have been submitted to the competent authority for review and were approved in May 2023. Restoration work commenced in September 2023, in conjunction with the installation of University History Museum exhibits. The restoration is expected to be completed and opened to the public by the end of 2025.



Exterior view of the University Archives - Northern Building, Jiangong Campus

4.5.2

Open Spaces and Fields

NKUST has a variety of sports venues, including an indoor stadium (with badminton courts), an all-weather court (Teng Hsiung Hall), a weight training room, a gym, a swimming pool, a table tennis classroom, an aerobics classroom, an athletic field (playground), a volleyball court, a beach volleyball court, a basketball court, a tennis court, an ice rink, an archery court, and a softball field. Facility information and opening hours are announced on the University website, and external users may apply for use on a project basis. These facilities are given priority for use in physical education classes, varsity team training, and activities approved by the University. Faculty and students are encouraged to engage in sports to enhance physical and mental health, promote interaction, and enrich life outside class. To optimize sports facilities and spaces, the University invested a total of NT\$21,163,681 in projects from March 2022 to December 2024, including:

 First Campus	resurfacing of Basketball Court A, volleyball court surfaces, and track and field running track
 Jiangong Campus	resurfacing of the north and south basketball court surfaces
 Nanzih Campus	upgrading outdoor sports field LED lighting

The athletic field and outdoor basketball and volleyball courts are open for use by nearby community residents for leisure exercise when this does not affect University teaching and activities, thereby promoting community health and well-being. To improve the efficiency and convenience of facility management, the University provides an online sports facility reservation system. Applicants can use the digital platform to check facility information and complete reservation applications. The system is easy to operate and effectively enhances facility utilization efficiency and service quality. Relevant usage regulations are implemented in accordance with the "Guidelines for the Management, Use, and Accounting of Venue and Equipment Revenues and Expenditures" and the "Sports Facility Management and Use Instructions".



Gymnasium information
and reservation system



PU track improvement at the First Campus



Basketball courts at Jiangong Campus



Volleyball court improvement at the First Campus



Chapter 5

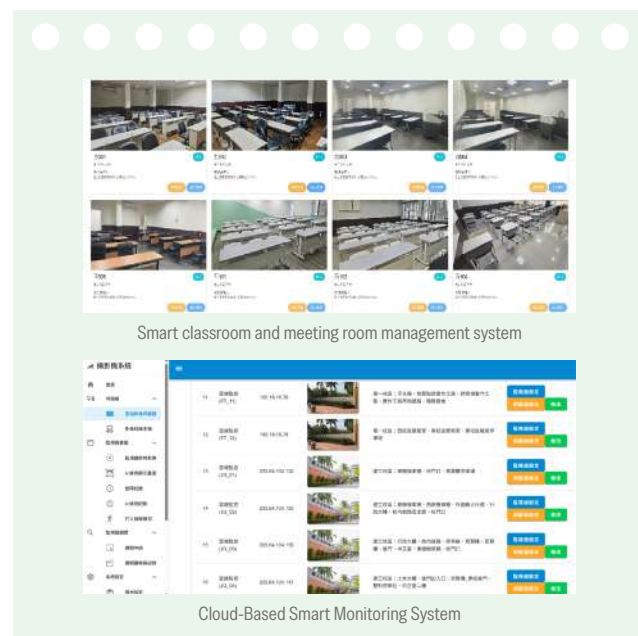
Green University

5.1 Smart Campus	111
5.2 Energy and Carbon Management	112
5.3 Air Quality and Environmental Monitoring	114
5.4 Water Resource Management	115
5.5 Waste Management	116
5.6 Green Transportation	117
5.7 Campus Ecology	119
5.8 Green Buildings	120
5.9 Green Procurement	121

5.1

Smart Campus

With the advent of the information age, technology and digit have become an integral part of modern life, making digital transformation one of the most critical issues in recent years. NKUST has begun to consider how to enhance the convenience, safety, and energy efficiency of campus life by leveraging the advantages of digital technology with campus life as the main axis. In view of this, NKUST has undertaken evaluation, research, and introduction of smart campus projects in various key aspects as energy saving and control, campus safety, transportation, e-administration, and smart communication in recent years. Through the model of cloud computing and digitization, we aim to provide faster campus services to all teachers, students, and administrative units, breaking down geographical barriers between different campuses. This approach not only enhances efficiency in various aspects but also achieves the benefits of energy saving and carbon reduction.



∴ Implementation of Smart Campus Project Development

Aspect	Development System	Description
Energy saving and control	Smart classroom and meeting room management system	The University has addressed access control for classrooms and meeting rooms by integrating an electrical power management system with smart scheduling management. Power is turned off during periods without classes or reservations, thereby avoiding energy waste. The sites are equipped with access control devices to manage and record the electricity supply to lights, air conditioners, and other equipment. In 2024, a total of 197 rooms were equipped with this system. It is planned to renovate and equip 10 additional classrooms, including general classrooms, multifunction classrooms, and discussion rooms, on the 4th floor of the administrative building at the Jiangong Campus to increase classroom space and improve the environment.
Campus Safety	Cloud-Based Smart Monitoring System	The University has established a cloud-based smart monitoring system and storage server, maintained according to information security standards, and set up buffer servers. Multiple video hosts have been integrated to streamline cross-campus video retrieval operations. The system autonomously monitors cameras and actively reports malfunctions in the event of abnormalities, enabling rapid management of equipment operating status. It also provides automatic video retrieval functions to eliminate the need for staff to spend excessive time assisting with video access, thereby shortening case-solving times. Through a comprehensive campus security monitoring system, campus facilities are properly maintained and preserved, ensuring effective management of assets and the safety of the campus.
Transportation	Dedicated Charging Stations for Electric Vehicles	In response to the development of smart transportation and green mobility, three dedicated charging stations for electric vehicles have been installed on each of the Jiangong and Nanzih campuses. These facilities make it more convenient for electric vehicle users to charge their vehicles and effectively reduce carbon emissions from gasoline-powered vehicles.
E-administration	New version of affairs application system	Faculty members, staff, and students can apply for various administrative services of the Administrative Services Section, General Administration Division, including vehicle access control for events, hanging promotional flags, displaying multimedia signage, refunding of air-conditioning cards and parking permits, and canceling traffic violation records for faculty members, staff, and students, through the system. Replace application method of hard copy approval process with electronic approval process to improve administrative efficiency.
	Student leave system - Addition of mental health leave function module	To promote students' mental health, mental health leave functions have been added to encourage students' self-awareness. In view of the prevalence of mental health issues, the University hopes to provide students with necessary rest time through the establishment of mental health leave, so that they can adjust their emotions and psychological state. The system has added a mental health leave function module to replace paper-based application and stamping, thereby reducing manual review time and improving administrative efficiency.
	Midterm early warning - Inquiry on LINE	The midterm early warning LINE inquiry function includes multiple detailed system features designed to improve students' learning efficiency and provide timely feedback on their learning status. The integration of these functions enables the midterm early warning LINE inquiry system not only to enhance learning efficiency, but also to strengthen monitoring and support for students' learning conditions.
	Student status and transcripts application system - New module for electronic document applications	Students can apply for electronic versions of certificates directly through the system, which enhances convenience. Students can choose their preferred payment and collection methods, reducing manual processing time and labor costs and improving overall administrative efficiency.
Smart communication	Continued completion of system development requests submitted by units each academic year and semester	Including Time Deposit Contract Maturity Smart Control System; National Kaohsiung University of Science and Technology Off-Campus Teaching Assignment Reporting System for Faculty; Guidance and Incentive Application System for Economically Disadvantaged Students (Learning Performance Reward, Certification Counseling Subsidy Incentive Program); and Subsidy System for Disadvantaged Student Financial Aid, among others.
	Cross-campus surveillance system integration	The update and interconnection of the telephone systems were completed, and the telephone exchange equipment was replaced at the five campuses between 2018 and 2021. Standardize the telephone exchange equipment across the five campuses to maintain phone call stability. Following the retirement of the switchboard operator in 2023, which resulted in a shortage of personnel, the school expanded the implementation of an AI-powered switchboard system. This system, utilizing voice recognition technology integrated with internal extensions, addresses the high volume of external call transfers and ensures that switchboard services are maintained during breaks, effectively replacing the need for human operators.

5.2

Energy and Carbon Management

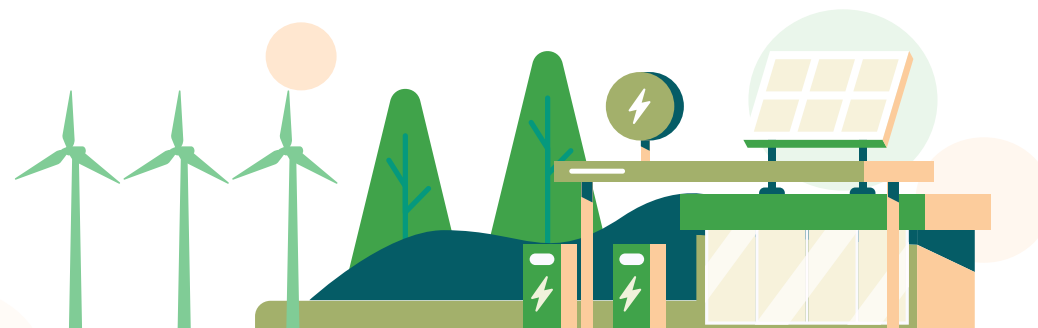
5.2.1

Energy Saving Policy

In response to the trends of global climate change and resource scarcity, environmental awareness in countries around the world has risen, driving the rise of green economy and sharing economy such as energy saving, low carbon, and recycling and reuse. As global citizens, the University actively considers how to introduce the green campus concept through effective practical actions, encouraging faculty and students to practice low-carbon lifestyles and make good use of campus space and ecological environments, thereby promoting new concepts in environmental protection. NKUST continues to promote energy-saving goals and implementation plans, reducing overall electricity usage through measures such as central air conditioning control, replacement of energy-efficient lighting fixtures and transformers, and the introduction of renewable energy sources. In 2024, we replaced outdated equipment, upgraded air conditioners older than nine years, and implemented other energy-saving measures, resulting in a total energy savings of approximately 527,776 kWh.

To promote the efficient use of campus energy, NKUST has established the 'Energy Saving Promotion Team' to improve the effectiveness of energy saving on campus and create a sustainable smart campus. The team meets once each semester, and its specific tasks are as follows:

- ☒ Formulate energy saving goals and implementation plans.
- ☒ Discuss energy saving improvement countermeasures and measures.
- ☒ Control and evaluate the energy saving promotion matters of each unit.
- ☒ Propaganda, education, and training on energy saving matters.
- ☒ Other matters related to energy saving.



∴ Electricity Consumption, Share of Renewable Energy, and Energy Use Intensity (EUI) in the Past Three Years

Years	Electricity Consumption	Share of Renewable Energy	Energy Use Intensity (EUI)
2024	41,887,000	0.04%	68.1
2023	40,815,454	0.06%	69.1
2022	40,675,876	0.08%	68.8

The share of renewable energy is calculated solely based on the kWh generated from green certificates

To understand greenhouse gas emissions, NKUST has defined its organizational boundary with reference to ISO 14064-1:2018 and the Ministry of Environment Guidelines for Greenhouse Gas Inventories (2024 version), and calculates fuel consumption for official vehicles and electricity consumption. For Category 1, the University can only provide greenhouse gas emissions from fuel used by official vehicles. Other anthropogenic fugitive emissions from systems such as air conditioners and drinking water equipment cannot be provided. In 2025, the University plans to fully launch greenhouse gas carbon inventories, produce inventory reports, and plan to conduct third-party verification.

∴ Greenhouse gas emissions in the past three years

Unit: MTCO_{2e}

Scope	2024	2023	2022
Scope 1 (fuel for official vehicles)	25.4	25.4	105
Scope 2	19,854	20,163	20,135
Total		20,188	20,239

NKUST's electricity consumption is measured based on the period from January 1 to December 31 of each year. NKUST calculates Scope 2 emissions by multiplying the electricity consumption in 2024* by a carbon emission factor of 0.494.

5.2.2

Renewable Energy

According to the Renewable Energy Development Act, the promotion target for renewable energy source power generation equipment by 2025 is a total capacity of over **27 GW**. The '2020 Photovoltaic 6.5GW Standard Achievement Plan' of Bureau of Energy, Ministry of Economic Affairs sets a long-term photovoltaic installation goal of reaching 20 GW by 2025, with 6 GW from roof PV systems and 14 GW from ground-mounted PV systems.

NKUST currently has installed photovoltaic systems, which are categorized into the following three types based on the charging method. In 2024, a total of **5,306,378 kWh** of electricity was generated:

- Charges for self-built system which sold to Taipower: The photovoltaic equipment installed at the Yanchao Campus, with a capacity of **499.2 kW**, was sold to Taipower (generating 622,688 kWh in 2024).
- Roof rental income:
 - Roof rental income: The First Campus rents the roof to manufacturers for the installation of photovoltaic equipment with a capacity of **447.47 kW** and sold to Taipower with rebates of 10.5% (generating 567,990 kWh in 2024).
 - In accordance with the central government's policy of 2021 Kaohsiung City Central Government Public Roof Joint Bidding and Leasing Project, suitable building roof areas in the Jiangong Campus, Nanzih Campus, Cijin Campus, and First Campus were selected for installation, with a total photovoltaic capacity of **2,979.76 kW** sold to Taipower with rebates of **15.05%** (generating 4,097,700 kWh in 2024).
- Self-built power generation for own use: The solar power generation system installed at the First Campus swimming pool has a capacity of **40.865 kW**, while the solar power generation system installed at the Nanzih Campus shipbuilding training workshop has a capacity of **2.36 kW**. In addition to grid-connected internal power generation for own use, renewable energy certificates are also publicly available for sale and transfer (Certificates issued by the Renewable Energy Certification Center, Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs. Every 1,000 kWh generated is one certificate. Based on the number of certificates, it is estimated that 18,000 kWh was generated in 2024).

∴ Renewable energy usage in the past three years

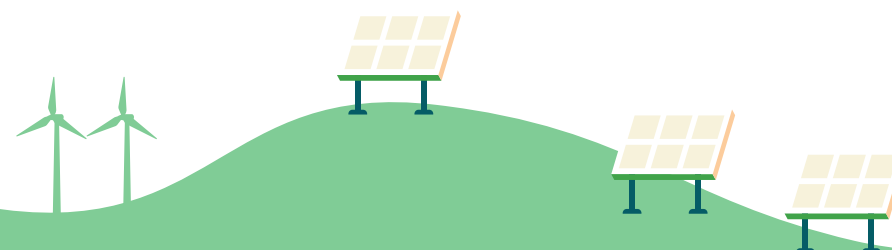
Unit: kWh

Years	Renewable energy generation	Green certificate generation	Total
2024	5,288,378	18,000	5,306,378
2023	5,537,891	26,000	5,563,891
2022	1,946,009	32,000	1,978,009

∴ Renewable energy facilities and generation capacity, renewable energy certificate purchases in 2024

Unit: kWh

Renewable Energy Facilities	Renewable energy generation	Green Electricity Certificate Generation
Establishing photovoltaic facilities on its own and selling electricity to Taipower (Yanchao Campus) 499.2kW (1.7971GJ)	622,688 kWh	-
Rental of roof to external manufacturers' photovoltaic facilities for electricity generation (roof of the College of Electrical Engineering and Computer Science building, roof of Practical Factory 1, roof of Practical Factory 2 at the First Campus) 447.47kW (1.6109GJ)	567,990 kWh	-
Self-generated electricity for own use and certificates sale (e.g., roof PV systems and ground-mounted PV systems of the First Campus swimming pool) 40.2kW (0.1447GJ)	-	18,000 kWh
Kaohsiung City Central Government Public Roof Joint Bidding and Leasing Project 2,979.76kW (10.7271GJ)	4,097,700 kWh	-
Subtotal	5,288,378 kWh	18,000 kWh
Total	5,306,378	



5.3

Air Quality and Environmental Monitoring

Promoting Indoor Air Quality Management Plans to Maintain a Healthy and Comfortable Campus Environment

In accordance with the promotion of the Indoor Air Quality Act, NKUST has formulated indoor air quality maintenance and management plans for each campus and appointed dedicated personnel for maintenance and management, and regularly conducts indoor air quality analysis. NKUST's declared control area is the library. Generally, the concentration of pollutants in the air is reduced by opening windows or enhancing ventilation. Self-inspection of air quality is conducted every six months and regular analysis is carried out every two years. For facilities that have obtained the Excellent indoor air quality label, regular inspections may be conducted every three years in accordance with the Guidelines for Promoting Self-Management Labeling of Indoor Air Quality.

Methods for Indoor Air Quality Testing in Different Areas in the University and Recent Test Results

Regular Indoor Air Quality Testing

NKUST conducted biennial indoor air quality analysis at the First Campus and Jiangong Campus in 2024 in accordance with the Indoor Air Quality Act. The analysis reports of each campus met the regulatory standards and received a good rating. Relevant information can be found on [NKUST's Environmental, Occupational Safety and Health Center website](#). As of 2024, indoor air quality monitoring sites on the Jiangong, Nanzih, First, and Yanchao campuses have all obtained the Excellent label, while the Cijin Campus has obtained the Good label.

Indoor Air Quality
Testing Report

Inspection Items and Testing Methods

Carbon Dioxide (CO ₂)	Infrared Method (NIEA A448.11C)
Particulate Matters (PM ₁₀)	Beta Ray Attenuation Method (NIEA A206.11C)
Formaldehyde	High Performance Liquid Chromatography (HPLC) of DNPH Derivative (NIEA A705.12C)
Bacteria	Concentration of Germs in the Air Testing Method (NIEA E301.15C)

Overview of Campus Environmental Monitoring

In order to ensure that the development projects of the First Campus and Yanchao Campus do not worsen the environmental quality of the surrounding areas during operation or construction, NKUST has implemented an environmental monitoring plan based on laws and regulations such as Water Pollution Control Act, Air Pollution Control Act, Noise Control Act, and the commitments stated in the environmental impact statement. This plan aims to establish a consistent monitoring system and conduct regular testing and tracking assessments on relevant items that may impact the environment to achieve the following objectives:

Environmental
Monitoring Report

- 1 Establish or supplement long-term background information on environmental quality to assess the long-term trend of environmental quality changes.
- 2 Evaluate the implementation effectiveness of countermeasures to mitigate or avoid adverse impacts, and propose revisions or remedial measures accordingly.
- 3 Construction plans or operational policies shall be adjusted in a timely manner to reduce the impact on the environment according to the monitoring results. All monitoring reports can be found on NKUST's Environmental, Occupational Safety and Health Center website.

Regular indoor air quality inspection (CO₂, PM₁₀, formaldehyde) -
Reading area of the Western-language book stacks on the 3rd floor of
the library at the First Campus

Indoor Air Quality Testing by Commissioned Professional Contractors

5.4

Water Resource Management

Implementing Water-Saving Actions and Practicing Sustainability in Everyday Details

In terms of water resource management, the University continues to promote measures to cherish water resources, including emphasizing careful use when drawing drinking water. According to total water consumption statistics, the University's total water consumption in 2024 was 644,601 metric tons, a decrease of 19,715 metric tons from the baseline year 2019 (664,316 metric tons), representing a reduction of 2.97%. This shows that water-saving management has gradually produced results.

∴ Total water consumption and water consumption per capita in the past three years

Unit: metric tons

Years	Total water consumption	Water consumption per capita
2024	644,601	21
2023	640,162	21
2022	595,549	19



Photo of Sewage treatment plant at the First Campus

Wastewater Reclamation and Reuse at Sewage Treatment Plants

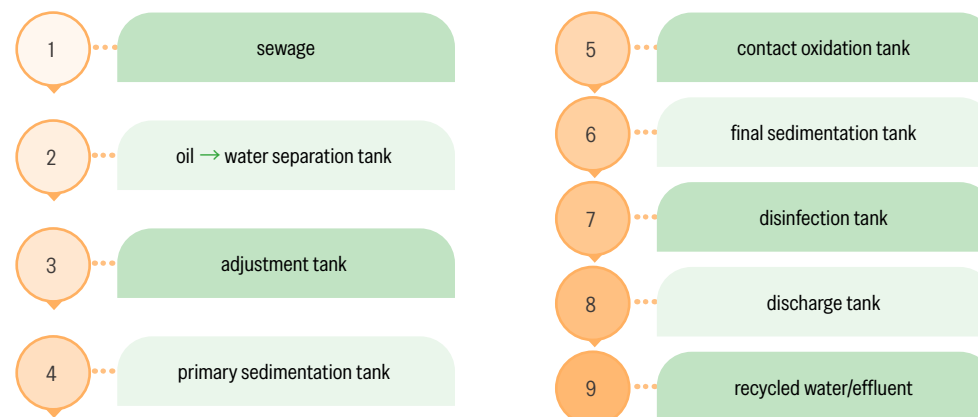
The First Campus and Yanchao Campus at NKUST have not yet completed connection to the municipal sewer system in line with local development policies. Therefore, NKUST has established sewage treatment plants to process the wastewater generated on campus. The sewage treatment procedures comply with the standards for effluent. After treatment, part of the water is recycled for green area irrigation or injected into the ecological pool for reuse, while the rest is discharged. The other campuses have been connected to the municipal sewer system.

└ Wastewater Treatment and Reuse at the First Campus

The campus wastewater treatment process consists of one sewage treatment plant in the East Campus, with the main sewage sources being domestic sewage from the teaching area buildings and laboratory washing sewage. After treatment every day, approximately 6.5 m³ of recycled water are used for green area irrigation, and the rest, approximately 196 m³, is discharged. The annual treatment capacity is approximately 71,434 m³. The secondary sewage treatment facility on the underground floor of Jingye Building in the West Campus mainly treats domestic sewage from student dormitories. The daily sewage inflow is approximately 60 m³, which is treated and injected into the ecological pool for reuse as effluent. The annual treatment capacity is approximately 21,774 m³. The sewage generated by the Lequn Building in the West Campus is treated and discharged, and the annual treatment capacity is approximately 32,411 m³.

The total annual treatment capacity of the West Campus is approximately 54,185 m³. According to the statistics, the total volume of recycled water for reuse in 2024 was approximately 24,132 m³ (approximately 2,358 m³ in the East Campus and 21,774 m³ in the West Campus). The First Campus at NKUST is equipped with a rainwater harvesting system. After simple treatment, rainwater collected from the roof is stored in a foundation storage tank integrated with the building's raft foundation. The annual rainwater recovery volume can achieve 10,000 tons, which is widely used for flushing toilets, irrigating green spaces, and suppressing dust. The ecological pool (also known as the Black-winged Stilt Pool) on campus covers approximately 14,000 square meters and has a total water storage capacity of 10,000 tons. By utilizing domestic wastewater and rainwater runoff, the ecological pool serves both as a landscape feature and as flood control purpose.

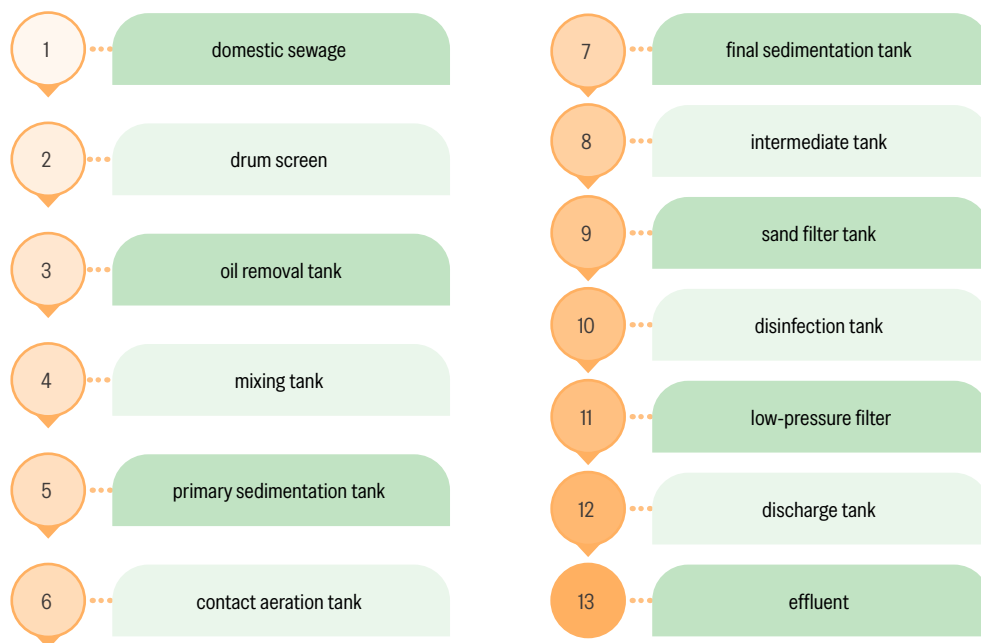
∴ The campus sewage treatment procedure at the First Campus is as follows:



Yanchao Campus

A sewage treatment plant is established in the Yanchao Campus, with the main sources of sewage being the domestic sewage from each teaching buildings and dormitories. The annual treatment capacity of the sewage treatment plant is approximately 33,571 m³, and the treated sewage is discharged to the tributary of the Dianbao River.

∴ The sewage treatment procedure is as follows:



Sewage treatment plant at the Yanchao Campus

5.5



Waste Management

Strengthening Campus Environmental Protection Measures; Building a Resource Circulation System Together

To maintain campus cleanliness and create a high-quality teaching environment, the University follows relevant regulations issued by the Ministry of Environment and actively promotes waste reduction and resource recycling policies to facilitate resource circulation and reuse. NKUST commissions licensed waste management contractors to handle the collection, loading, transport, and treatment of waste on campus. At the same time, comprehensive recycling facilities are installed on campus, and ongoing awareness of waste sorting is promoted via official email, building a consensus among all faculty and students. These efforts jointly advance waste reduction and resource recycling goals, improve environmental sanitation, and reduce environmental impacts. In 2024, the total amount of general waste generated was 1,176 metric tons, with per capita waste generation of 0.038 metric tons (38 kg/person).

Item	Summary of Contents	Implementation Status
General Waste Treatment	NKUST promotes the 3R policy (Reduce, Reuse, Recycle), implements campaigns for waste reduction and recycling, and has replaced incineration of documents with water shredding.	Total amount: 1,176.37 metric tons
		Incineration: 902.85 metric tons
		General recycling: 142.32 metric tons
		Recycling of scrapped assets: 127.28 metric tons
Treatment of Experimental Waste	Chemical and biomedical experimental waste is handled by qualified contractors; reporting and statistics are carried out using the Ministry of Environment's system.	Reuse via water shredding: 3.92 metric tons
		Total amount: 14.222 metric tons
		Chemical treatment: 3.269 metric tons
		Physical treatment: 6.46 metric tons
Treatment of Construction Waste	Construction waste from works projects is cleared by licensed contractors. Residual soil and rock materials are classified and recycled in accordance with regulations.	Incineration: 4.493 metric tons
		In compliance with regulations, construction waste such as soil, sand, gravel, bricks, and concrete blocks is properly sorted for reuse or transport.

Unit: Metric tons

Type of Waste	2024	2023	2022
General waste	1,176	1,138	1,013
Waste Incineration	903	906	801
General Recycling	142	149	139
Scrapped Property Recycling	127	70	69
Recycling of Water-Dissolving Into Pulp By Water	4	12	5
Construction waste	442	47	893
Experimental waste	14	9	11



August 6, 2024, National Kaohsiung
University of Science and Technology -
Jiangong Campus



August 7, 2024, National Kaohsiung
University of Science and Technology -
Nanzih, First, and Yanchao Campuses



Certificate of transportation and disposal
issued by environmental protection companies

Green Transportation

Shared Mobility Plan

NKUST cooperates with Transportation Bureau of Kaohsiung City Government to provide students with convenient, comfortable, and cost-effective transportation services. This plan aims to increase students' willingness to take public transportation, reduce student traffic accidents, improve campus safe transportation environment, and effectively utilize resources. Simultaneously, we partner with the Kaohsiung City Government to launch a taxi ride-sharing plan and a 7C bus subsidy program. These programs cater to the First Campus and Yanchao Campus, which have less convenient transportation options. Students can now access transportation services directly on campus. Additionally, students who utilize the 7C bus service receive transportation subsidies. In 2024, 43,416 students utilized the 7C bus service. We aim to provide teachers and students with a safe transportation option, creating a safe campus environment with zero accidents and zero distance.

Campus Shuttle Buses

To provide convenient, comfortable, and cost-effective transportation between campuses for faculty, staff, and students, shuttle buses are provided between the Jiangong Campus and Yanchao Campus, and between the Jiangong Campus and the First Campus. A scheduled reservation system is used to connect the transportation network between campuses. In 2024, 79,431 faculty, staff, and students took the school vehicles.



Campus shared bicycles

Yanchao Campus and First Campus are vast and 480 shared bicycles are provided for the use by teachers and students with campus. There are dedicated personnel responsible for maintenance.

Public bike share - YouBike 2.0 rental

There are a total of five Public bike share - YouBike 2.0 rental stations located in NKUST's First Campus, enabling teachers and students to ride and commute and the public to ride for business. It is located at the main entrance of the East Campus, behind the library, across from the third parking lot and next to the swimming pool in the West Campus, as well as on the sidewalk of the female dormitories in NKUST's First Campus. Faculty members, staff, and students can use 'iPass' electronic stored value card function of staff card or student card to rent, making rental more convenient.



Public bike share - YouBike 2.0 rental

Statistics on green transportation in the past three years

Types of Vehicles within Campus	2024		2023		2022	
	Total	Number of Electric Vehicles	Total	Number of Electric Vehicles	Total	Number of Electric Vehicles
School vehicles	14	0	14	0	14	0
Cars	5,784	91	4,901	33	4,809	13
Motorcycles	13,797	427	14,966	403	17,550	593

Statistics on commuting items in the past three years

Unit: Persons

	Student		Faculty and staff	
	Cars	Motorcycles	Cars	Motorcycles
2024/2025 Academic Year	1,327	14,174	1,159	1,080
2023/2024 Academic Year	1,327	14,174	1,159	1,080
2022/2023 Academic Year	1,349	16,960	1,510	1,146

Statistics on sustainable commuting in the past three years

	2024	2023	2022
Taking Ride-sharing Transportation	122,847 passenger-times	115,097 passenger-times	100,135 passenger-times
Number of bicycle applications	350	382	419
Number of shared bicycles within campus	480 bicycles	530 bicycles	560 bicycles

5.7

Campus Ecology

Campus Ecological Pond: Integrating Recreation, Conservation, and Education

Incorporating landscape and flood control functions, NKUST's First Campus constructed an ecological pool called Black-winged Stilt Pool, covering an area of approximately 14,000 square meters. Apart from effectively regulating the runoff during heavy rain in the west area of the First Campus, more importantly, it uses ecological engineering methods to create habitats, building a water area where organisms and people can interact closely. The six functional orientations of campus ecological pool are as follows:

Flood Drainage and Retention Function	The ecological pond covers an area of approximately 14,000 m² and can store about 10,000 metric tons of water, regulating peak flows during heavy rainfall and reducing flooding risks Specific Benefits: Helps regulate floodwaters and reduce disaster losses in low-lying areas
Water Resource Recycling and Reuse	Wastewater from student dormitories (Jingye Building and Lequn Building) is collected and treated for reuse, reducing discharges by approximately 90,000 metric tons per year and lowering overall campus water consumption Specific Benefits: Reduces wastewater discharges by 90,000 metric tons and conserves water resources
Enhanced Landscape and Recreation Function	Provides a natural leisure space for faculty, students, and community residents, combining ecology with landscape beautification Specific Benefits: Increases public recreational space and improves campus landscape
Landscape Ecological Diversity	The surrounding area nurtures more than 60 species of birds, insects, aquatic plants, and trees, demonstrating high biodiversity Specific Benefits: Enriches the campus ecosystem and supports a wide range of species
Conservation of native aquatic flora and fauna	This focuses on the ecological health of species, ensuring the balance and biodiversity of aquatic ecosystems. It includes regular organic management practices, such as dredging, to maintain the functionality of ecological pools and protect the habitat of native species Specific Benefits: Stabilizes native populations and maintains the ecological balance of the water body
Provision of Ecological Education Space	Creating an eco-campus to cultivate students' environmental awareness and promote the campus practices of sustainable development principles Specific Benefits: Enhances the effectiveness of environmental education and deepens the promotion of a sustainable campus

Biodiversity and Pest Control

- ✦ In 2024, greening works for the construction site of the Taiwan Advanced Materials Forming Technology Center at the First Campus included planting 18 Golden Trumpet Trees, 49 Formosan Michelias, 147 River Oaks, 92 Ixoras, 112 Common Jasmin Oranges, and 1,602 m² of Centipedegrass.
- ✦ Since Kaohsiung is located in a tropical region with a hot and humid climate, it is prone to mosquito breeding, which can lead to outbreaks of dengue fever. To prevent the occurrence of dengue fever, the Environmental Health and Safety Center of NKUST conducts preventive measures, including environmental spraying, one week prior to the start of each semester. The insecticides used are registered and approved by the Environment Protection Administration for special environmental sanitation purposes, such as Cyperlin, Sumithion, Phenitrothion, Bifeijiang, etc., which are effective in controlling adult mosquito populations. Routine campus protection uses general environmental pesticide Cypermethrin to ensure a healthy campus environment.
- ✦ To maintain the campus landscape and prevent the breeding of dengue fever mosquitoes, the General Administration Division of NKUST, following the recommendations of a tree doctor, has adopted a method of periodically filling tree cavities with lime powder. This approach avoids the potential negative impact of using foaming agents on tree growth, achieving a dual effect of protecting tree health and preventing mosquito breeding.



5.8

Green Buildings

Green Building Concepts and Principles

Green buildings are based on the four core objectives of "ecology," "energy conservation," "waste reduction," and "health", further broken down into nine specific evaluation indicators: biodiversity, greening volume, site water retention, daily energy saving, CO₂ reduction, waste reduction, indoor environment, water resource management, and improvement of sewage and garbage. These nine indicators serve as the basis for green building assessment.

Sustainable Campus Development Achievements

NKUST adheres to the concept of sustainable campus development. In addition to considering coherence, educational value, practicality, safety and diversity in architectural planning, the concept of green buildings is also incorporated, aiming to provide high-quality teaching sites, promote environmental protection and energy saving, and advance environmental education through green building design. The goal is to construct a friendly campus that is sustainable, forward-looking, and environmentally friendly.

Existing Green Building Certifications

The University has completed 12 green buildings with a total floor area of 134,309.77 m², accounting for 22% of the total campus building area. Among all the green buildings, the College of Hydrosphere Science, the diving pool and Seafood Engineering Building of Nanzih Campus, the instructional building of Business School, the second phase building of College of Management, the College of Humanities and Social Sciences, the Library and Information Building of Yanchao Campus, and the Yi-Jhih dormitory of Jiangong Campus have all obtained qualified green building classification. Phase one of faculty members, staff, and student dormitory of and the Administration Building of the Yanchao Campus has passed five indicators and seven indicators, respectively, both receiving bronze-level green building classification. The Second Building of Industrial Experimental Park, and the Southern Taiwan Emergency Response Training and Logistics Center in the First Campus have both passed eight indicators, receiving silver-level green building classification. In addition, the newly constructed Taiwan Advanced Materials Forming Technology Center at the First Campus, with a building area of 2,344.67 m² (0.38% of total building area), has obtained the Silver Candidate Green Building Certificate. It meets eight indicators: greening volume, site water retention, daily energy saving, CO₂ reduction, waste reduction, indoor environment, water resources, and improvement of sewage and garbage.



Certified
Green Buildings

College of Hydrosphere Science, Diving Pool, and Seafood Engineering Building (Nanzih Campus); College of Business Teaching Building, College of Management Phase II Building, College of Humanities and Social Sciences, and Library and Information Building (Yanchao Campus); Yi-Jhih Male Dormitory (Jiangong Campus)



Bronze-Level
Green Buildings

Faculty and Student Dormitory Phase I, and Administrative Building (Yanchao Campus)



Silver-Level
Green Buildings

Industrial Experimental Park Building II, and Southern Professional Training Base and Materials Dispatch Center (First Campus)



Silver-Level
Green Buildings

New Construction Project for the Taiwan Advanced Materials Forming Technology Center, First Campus (already obtained Candidate Green Building Certificate)



Southern Regional Training Facility

5.9

Green Procurement

Green procurement aims to reduce environmental impact by purchasing green products that are recyclable, low-pollution, and energy-saving. It encourages the production and use of green products to promote a culture of green consumption. In line with the Executive Yuan's "Regulations for Priority Procurement of Eco-Products" and related provisions, NKUST has clearly stipulated in the "NKUST Procurement Guidelines" that environmental protection products listed on the EPA Green Living Information Platform, such as green-labeled and eco-friendly products, are to be given priority in procurement procedures. NKUST actively promotes green procurement practices on campus. In 2024, the overall proportion of green procurement items reached 98.24%. Green procurement of electronic products (including host computers, scanners, portable projectors, etc.) reached 100%, and sustainable cleaning supplies and office paper also reached 100%.

∴ Green procurement rate in the past 3 years

Procurement Category	Green Procurement Rate		
	2024	2023	2022
Overall green procurement project	98%	100%	100%
Type I designated procurement environmentally friendly products	98%	100%	100%
Type II and III designated procurement environmentally friendly products	35%	34%	-
Electronic products	100%	100%	100%
Sustainable cleaning supplies	100%	100%	100%
Office paper	100%	100%	100%

∴ Environmental benefits generated from green procurement in the past 3 years

Environmental Benefit	2024	2023	2022
Reduced tree felling (number of trees)	12,110.09	9,216	8,745
Reduced carbon dioxide emissions (tons)	53	40	39
Waste reduction (tons)	0	0	0
Cost reduction (NT\$)	301,125	227,655	218,677



Appendix

Sustainability Performance Summary Table

Sustainable courses

Item	Unit	2022	2022	2024	Corresponding Chapter
Sustainable courses	Course	1,199	1,344	1,465	3.2.1 Sustainable Courses
Departments that list sustainable courses as required credits	Club	38	46	46	3.2.1 Sustainable Courses
Ratio of departments that list sustainable courses as required credits to all departments	Percentage	52.8%	63.9%	63.9%	3.2.1 Sustainable Courses

Sustainable research

Item	Unit	2022	2023	2024	Corresponding Chapter
Journal articles on sustainable research	Club	283	340	318	3.5.1 Research Projects and Papers on Sustainability
Research projects on sustainability	Club	141	199	221	3.5.1 Research Projects and Papers on Sustainability
Research fellow engaged in sustainability-related research projects/ journal articles	People	133	178	205	3.5.1 Research Projects and Papers on Sustainability
Open Access Journal Article	Club	525	367	234	3.5.1 Research Projects and Papers on Sustainability
Ratio of Open Access Journal Article to all journal articles	Percentage	54.8%	46.1%	29.32%	3.5.1 Research Projects and Papers on Sustainability

Smart green campus

Item	Unit	2022	2023	2024	Corresponding Chapter
Electricity consumption	kWh	40,675,876	40,815,454	41,887,000	5.2.1 Energy Saving Policy
Energy Unit Index (EUI)	kWh/m ³	68.8	69.1	68.1	5.2.1 Energy Saving Policy

Item	Unit	2022	2023	2024	Corresponding Chapter
Greenhouse gas emissions (Scope 1)	MTCO ₂ e	105	25.4	25.4	5.2.1 Energy Saving Policy
Greenhouse gas emissions (Scope 2)	MTCO ₂ e	20,135	20,163	19,854	5.2.1 Energy Saving Policy
Renewable energy generation (Including feed-In tariff and green energy certificates)	kWh	1,978,009	5,563,891	5,306,378	5.2.2 Solar Power Generation
Statistics on waste(including general waste, resource recycling, experimental waste, and construction waste)	Metric ton	1,025	1,194	2,815	5.5 Waste Management
Water consumption	kWh	595,549	640,162	644,601	5.4 Water Resource Management
Water consumption per capita	Metric tons/person	19.31	21.03	20.79	5.4 Water Resource Management
Ratio of type I designated procurement environmentally friendly products	Percentage	99.6%	99.6%	98.24%	5.9 Green Procurement
Valid Green Building Label Certificate (including Green Building Candidate Certificate)	Certificate	4	4	4	5.8 Green Buildings
Number of public transportation passengers	People	100,135	115,097	122,847	5.6 Green Transportation
Number of bicycle applications	Number of Cases	419	382	350	5.6 Green Transportation

Diversification and well-being

Tuition and miscellaneous fees exemption	Unit	2022	2023	2024	Corresponding Chapter
Proportion of participants in University Council					
Number of academic-related representatives	Percentage	82%	83%	82%	2.1.1 Decision-making Meetings and Organizations
Number of non-academic-related representatives	Percentage	7%	7%	7%	2.1.1 Decision-making Meetings and Organizations
Number of student representatives	Percentage	11%	11%	11%	2.1.1 Decision-making Meetings and Organizations
Gender ratio of participants in University Council (male:female)	Proportion	4.26	3.06	3.5	2.1.1 Decision-making Meetings and Organizations
Economically disadvantaged students					
Number of incentives distributed	Amount	20,748,615	17,657,682	16,001,011	3.1.3 Support for Economically Disadvantaged Students
Number of people incentives distributed to	Applicant	4,384	3,568	3,350	3.1.3 Support for Economically Disadvantaged Students

Item	Unit	2022	2023	2024	Corresponding Chapter
Tuition and miscellaneous fees exemption					
Requested amount	Amount	84,624,460	84,412,430	77,845,304	3.1.3 Support for Economically Disadvantaged Students
Number of applicants	Applicant	4,961	4,940	4,585	3.1.3 Support for Economically Disadvantaged Students
Student loans					
Requested amount	Amount	260,697,836	253,764,064	248,069,928	3.1.3 Support for Economically Disadvantaged Students
Number of applicants	Applicant	8,809	8,430	8,504	3.1.3 Support for Economically Disadvantaged Students
Disabling injury and occupational disease					
Recordable incidents of disabling injuries and occupational diseases among faculty members and staff	Number of Cases	2	0	0	2.7.1 Occupational Safety

Campus sustainability and social engagement

Item	Unit	2022	2023	2024	Corresponding Chapter
Number of government sustainability-related projects undertaken by faculty members and staff	Club	25	25	36	3.5.4 Sustainable Government Collaboration Projects
Number of sustainable clubs	Club	9	2	4	3.3.1 Sustainable Clubs
Number of sustainability-related continuing education courses	Course	95	8	14	3.2.2 Continuing Education

SASB: Education Index

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Content	Page
Data Security	SV-ED-230a.1	Description of approach to identifying and addressing data security risks	2.8 Information Security	65
	SV-ED-230a.2	Description of policies and practices relating to collection, usage, and retention of student information	2.8 Information Security	65
	SV-ED-230a.3	(1) Number of data breaches (2) percentage involving personally identifiable information (PII) (3) number of students affected	(1) 0 case (2) 0% (3) 0 person	67
Quality of Education & Gainful Employment	SV-ED-260a.1	Graduation rate	86%	99
	SV-ED-260a.2	On-time completion rate	84%	99
	SV-ED-260a.3	Job placement rate	51%	99
	SV-ED-260a.6	Description of policies and practices related to student indebtedness and programme loan defaults	3.1.4 Measures to Assist Students	73
Marketing & Recruiting Practices	SV-ED-270a.1	(1) Description of policies to ensure disclosure of key performance statistics to prospective students in advance of collecting any fees and (2) discussion of outcomes	3.1.1 Talent Development	69
	SV-ED-270a.2	Total amount of monetary losses as a result of legal proceedings associated with advertising, marketing, and mandatory disclosures	No property damage incurred	-
	SV-ED-270a.3	(1) Instruction and student services expenses and (2) marketing and recruiting expenses	2.1.3 Financial Information	43
	SV-ED-270a.4	Revenue from: (1) government-funded student aid and (2) private student loans	Not applicable (NKUST is a non-profit organization)	-
Activity Metrics	SV-ED-000.A	Number of students enrolled	27,419 individuals	62
	SV-ED-000.B	Number of applications received for enrollment	7,050 people (number of individual applicants for admission at NKUST)	70
	SV-ED-000.C	Average total credits earned by each student upon graduation (Adjusted to be applicable to the indicators of NKUST)	3.1.1 Talent Development	69
	SV-ED-000.D	Number of: (1) teaching staff and (2) all other staff	(1) 1,035 individuals (2) 2,302 individuals	49

SDGs & USR Project Mapping

Chapter/Project	SDGs											
4.1 University Social Responsibility USR												
	No Poverty	Zero Hunger	Good Health and Well-being	Quality Education	Affordable and Clean Energy	Decent Work and Economic Growth	Industry, Innovation and Infrastructure	Sustainable Cities and Communities	Responsible Consumption and Production	Climate Action	Life Below Water	Partnerships
U Can Do It! Kaohsiung Mountain and Urban Core Sustainability Blueprint	●			●		●		●		●		
Good Fish Next Door Project					●				●		●	●
Coastal Placemaking and Social Innovation - Kaohsiung Fishing Village Project		●							●		●	
Carbon-Free Ideal - Net-Zero in Ciaotou/Nanzih								●	●	●		
Bamboo Dream Learning + Active Leisure in Garden Fields						●	●	●				

Chapter/Project	SDGs											
4.1 University Social Responsibility USR HUB												
	No Poverty	Zero Hunger	Good Health and Well-being	Quality Education	Affordable and Clean Energy	Decent Work and Economic Growth	Industry, Innovation and Infrastructure	Sustainable Cities and Communities	Responsible Consumption and Production	Climate Action	Life Below Water	Partnerships
Alishan Railway Tourism Development - Rooted and Co-existing with Local Culture in Luku								●				
Green Xiaolin: Revitalizing the Taivoan Culture								●				
Haishan Youth - Digital Learning Partner Instruction and Camp				●								
Dancing in the New Garden: Linking Talent in the Kaohsiung-Pingtung Aquatic Industry Project						●						
Participatory Social Design Practice: Xiao Liuqiu Environmental Education								●				
Grand Southern Industrial Smart Net-Zero Initiative							●					
Smart Aging and Intelligent Care			●									
Total	1	1	1	2	1	3	2	6	3	2	2	1

● indicates that the project corresponds to the UN Sustainable Development Goals (SDGs)

STARS Content Index (2025 v3.3)

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter
Report Preface	PRE-1	Letter from the CEO (or President/Chief Executive)	Message from the President
	PRE-2	Distinctive Features	Key Sustainability Highlights Institutional Achievements and Highlights
	PRE-3	Institutional Characteristics	1.1.2 Campus Scope and Services
	PRE-4	Reporting Approach	About This Report
Academics (AC)	AC-1	Provision of Sustainability-Related Courses	3.2.1 Sustainable Courses 3.6 Teaching Quality Assurance
	AC-2	Undergraduate Courses	3.2.1 Sustainable Courses
	AC-3	Graduate Courses	3.2.1 Sustainable Courses
	AC-4	Applied Learning	3.2.2 Continuing Education
	AC-5	Assessment of Sustainability Competencies	3.2.1 Sustainable Courses
	AC-6	Sustainability Research	3.5.1 Research Projects and Papers on Sustainability
	AC-7	Sustainability Research Centers	3.5.4 Sustainable Government Collaboration Projects
	AC-8	Responsible Research and Innovation	3.7 Academic and Ethical Integrity 3.5.4 Sustainable Government Collaboration Projects
Engagement (EN)	EN-1	Outreach and Communication	3.2.2 Continuing Education 3.2.5 Marine Specialty Research Courses
	EN-2	Extracurricular Activities	3.3.1 Sustainable Clubs 3.3.2 Sustainable-Related Activities 3.3.3 Service Learning and Rural Service
	EN-3	Employee Engagement and Training	2.1 Diversity Governance 2.4 Gender Equality

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter
Engagement (EN)	EN-5	Civic Engagement	1.3 Campus Sustainability Practices 3.3.2 Sustainable-related Activities 3.3.3 Service Learning and Rural Service Key Sustainability Highlights 3.5.4 Sustainable Government Collaboration Projects 4.1 University Social Responsibility
	EN-6	Community Partnerships	4.1 University Social Responsibility
	EN-7	Continuing Education	3.2.2 Continuing Education
	EN-8	Shared Facilities	4.5.2 Open Spaces and Fields
	EN-9	Inter-University Cooperation	2.2.2 International Cooperation Alliance 3.5.4 Sustainable Government Collaboration Projects
	OP-3	Water Usage	5.4 Water Resource Management
	OP-5	Energy Usage	5.2 Energy and Carbon Management
	OP-7	Food Service Procurement	2.7.3 Food Safety
	OP-9	Sustainable Procurement System	5.9 Green Procurement
	OP-10	Procured Goods	5.9 Green Procurement
	OP-11	Materials Management	2.7.3 Food Safety
	OP-12	Waste Generation and Recycling	5.5 Waste Management
	OP-14	Distribution of Commuting Modes	5.6 Green Transportation
	OP-15	Air Travel	-

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter
Planning & Administration (PA)	PA-1	Sustainability Coordination	2.1.1 Decision-making Meetings and Organizations
	PA-2	Commitment and Planning	1.3 Sustainability Philosophy and Action Strategies
	PA-3	Institutional Governance	2.1.1 Decision-making Meetings and Organizations
	PA-4	Sustainable Investment Programs	2.1.4 Investment Management and Sustainable Investing
	PA-5	Investment Holdings	2.1.4 Investment Management and Sustainable Investing
	PA-6	Institutional Climate	2.3 Workforce Diversity 3.1.3 Support for Economically Disadvantaged Students
	PA-9	Affordability and Accessibility	3.1.3 Support for Economically Disadvantaged Students
	PA-11	Health, Safety and Well-Being	2.6 Campus Safety 2.7 Occupational Safety and Health Management
	PA-12	Employee Rights	2.3 Workforce Diversity
	PA-13	Pay Equity and Living Wages	2.3.2 Remuneration and Benefits Policy

GRI Content Index

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter
GRI 2: General Disclosures 2021	2-1	Organizational details	About This Report
	2-2	Entities included in the organization's sustainability reporting	About This Report
	2-3	Reporting period, frequency and contact point	About This Report
	2-4	Restatements of information	About This Report
	2-5	External assurance	Appendix Third Party Assurance Statement
	2-6	Activities, value chain and other business relationships	1.5 Material Topics and Engaged Stakeholders
	2-7	Employees	2.3.1 Diverse and Equal Workplace
	2-8	Workers who are not employees	2.3.1 Diverse and Equal Workplace
	2-9	Governance structure and composition	2.1.1 Decision-making Meetings and Organizations
	2-10	Nomination and selection of the highest governance body	2.1.1 Decision-making Meetings and Organizations
	2-11	Chair of the highest governance body	2.1.1 Decision-making Meetings and Organizations
	2-12	Role of the highest governance body in overseeing the management of impacts	2.1.2 Internal Control Mechanisms and Risk Management
	2-13	Delegation of responsibility for managing impacts	Organizational Structure and Tasks of the Sustainability Report Compilation Committee and Working Group
	2-14	Role of the highest governance body in sustainability reporting	About This Report
	2-15	Conflicts of interest	2.1.1 Decision-making Meetings and Organizations
	2-16	Communication of critical concerns	Executive Roundtable Meeting
	2-17	Collective knowledge of the highest governance body	Professional expertise and collective knowledge of the highest governance body in sustainable development
	2-18	Evaluation of the performance of the highest governance body	3.6 Teaching Quality Assurance
	2-19	Remuneration policies	2.3.2 Remuneration and Benefits Policy (remuneration of the highest governance body is not disclosed)
	2-20	Process to determine remuneration	2.3.2 Remuneration and Benefits Policy

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter
GRI 2: General Disclosures 2021	2-22	Statement on sustainable development strategy	Message from the President; 1.3 Sustainability Philosophy and Action Strategies
	2-23	Policy commitments	Message from the President; Vision for Academic Development
	2-24	Embedding policy commitments	1.3 Sustainability Philosophy and Action Strategies
	2-25	Processes to remediate negative impacts	2.5 Grievance Mechanisms
	2-26	Mechanisms for seeking advice and raising concerns	Implementation Status of the University Affairs Suggestion System
	2-27	Compliance with laws and regulations	2.5.4 Key Significant Events
	2-28	Membership associations	2.2.1 Membership in Public Associations
	2-29	Approach to engaged stakeholder engagement	1.5.2 Material Topics Management Policy
	2-30	Collective bargaining agreements	2.2.1 Membership in Public Associations

GRI Index for Material Topics

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter
GRI 3: Material Topics 2021	3-1	Process to determine material topics	1.5.1 Identification of Material Topics
	3-2	List of material topics	1.5.1 Identification of Material Topics
Campus Ecology and Environmental Protection			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		Ecology and Environmental Protection	Chapter 5: Green University
Student Awards and Counseling			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		Student Academic Support and Counseling	3.1.2 Resource Classroom Counseling 3.1.3 Support for Economically Disadvantaged Students 3.8.1 Career Exploration and Counseling
Research, innovation, and Industry-academia Collaboration			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		Quality of Academic Research	3.5 Academic Performance
Teaching Quality Assurance and Evaluation			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		Teaching Quality and Effectiveness	3.6 Teaching Quality Assurance
Sustainable Development strategy			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		Action Strategies of Sustainable Development	1.3 Sustainability Philosophy and Action Strategies 4.1 University Social Responsibility
University Social Responsibility			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	4.1 University Social Responsibility

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter
Academic and Ethical Integrity			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		Academic and Ethical Integrity	3.7 Academic and Ethical Integrity
Information Security			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.8 Information Security
Compliance with laws and regulations			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		Compliance with laws and regulations	2.1.2 Internal Control Mechanisms and Risk Management
Institutional Governance			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		Institutional Governance	2.1.1 Decision-making Meetings and Organizations 2.1.2 Internal Control Mechanisms and Risk Management
International Linkages and Cooperation			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
NKUST Customized Topics		International Linkages	4.2 International Exchange
Financial Governance and Performance			
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	2.1.3 Financial Information
	201-3	Defined benefit plan obligations and other retirement plans	2.3.2 Remuneration and Benefits Policy
	201-4	Financial assistance received from government	2.1.3 Financial Information

Independent Assurance Statement

 確信聲明書 國立高雄科技大學永續報告書 台灣德商北德技術服務顧問股份有限公司(簡稱 TUV NORD)接受國立高雄科技大學的委託，根據 AA1000 保證標準第三版與 GRI 永續性標準(GRI 準則)及相關保證標準，執行 2024 年永續報告書查證(以下稱永續報告書)。 聲明書範疇及保證標準 - 確信聲明與國立高雄科技大學 2024 年永續報告書揭露範疇一致，報告期間為 2024 年 1 月 1 日至 2024 年 12 月 31 日。 - 依照 AA1000 保證標準第三版第一應用類型查證國立高雄科技大學遵循 AA1000 當責性原則的要求，不包含對於報告書揭露的資訊/數據之可信賴度的查證。 - 參考永續會計準則委員會 (Sustainability Accounting Standards Board, SASB) 教育行業永續會計準則。 - 參考聯合國永續發展目標 (UN Sustainability Development Goals, SDGs)。 - 參考永續追蹤評量及測量系統 (Sustainability Tracking Assessment and Rating System, STARS)。 預期使用者 本聲明書的預期使用者為國立高雄科技大學的利害關係人。 保證型態與等級 依照 AA1000 保證標準第三版的第一應用類型，中度保證等級的要求。 意見聲明 國立高雄科技大學參考 GRI 永續標準與 AA1000 包容性、重大性、回應性與衝擊性的相關準則，永續報告書內容呈現了高階主管的承諾、利益相關者的需求與期待，完成了有效的整合並達成永續發展績效目標，TUV NORD 確信其對於環境、社會及治理等資訊的呈現是正確的。 確信國立高雄科技大學參考 SASB 教育行業永續會計指標揭露相關主題。 確信國立高雄科技大學參考聯合國永續發展目標 (UN Sustainability Development Goals, SDGs)。 確信國立高雄科技大學參考永續追蹤評量及測量系統 (Sustainability Tracking Assessment and Rating System, STARS)。 第 1 頁，共 3 頁	 查證方法 我們的查證服務將依據前述保證標準與 TUV NORD 永續報告書查證協定規定，就永續報告書的查證進行規劃與執行。我們的查證包含下列活動： * 如報告中提及，收集相關績效目標的客觀證據。 * 確信本地或國家法規的預期：公眾觀點及/或專家意見中提出的國際標準與此類一般性考量相關事項。 * 文件於 GRI 準則應用需求背景下審查記錄報告內容詳確。 * 文件於 GRI 準則應用需求背景下審查記錄報告內容詳確。 * 與經理和相關工作人員就公司對於利害關係人關注議題進行討論。 * 與涉及永續發展管理、收集資訊與報告準備的相關人員討論。 * 詢問重要的組織發展及相關內部審計結果。 * 針對 AA1000 (2018) 當責性原則及其它保證標準要求進行審查。 結論 報告書中針對包容性、重大性、回應性及衝擊性等 AA1000 當責性原則查證結果如下： 包容性 國立高雄科技大學透過問卷方式，識別利害關係人及其關注之議題，經永續發展委員會與利害關係人的議會，由 26 項永續主題中包含經濟、治理、社會、人權及氣候的衝擊等，決定 12 項重大議題。 重大性 國立高雄科技大學參考 GRI 準則的指引，SASB 教育行業永續會計指標揭露相關主題，聯合國永續發展目標 (UN Sustainability Development Goals, SDGs)、永續追蹤評量及測量系統 (Sustainability Tracking Assessment and Rating System, STARS) 指標，綜合考量對公司的影響程度，完整揭露公司的重大風險及機會並界定出報告書重大主題優先順序。 回應性 國立高雄科技大學的永續報告書清楚說明永續性與組織策略的關係及重大主題對應的績效目標及其達成狀況，充分回應利害關係者關注的重大議題。 衝擊性 國立高雄科技大學永續報告書完整的類別出重大主題，足以反映組織在經濟、環境及社會的衝擊影響，並已建立穩健的追蹤以監督、量測該衝擊的影響性，透過公司的治理建立短、中、長期的因應策略規劃。 第 2 頁，共 3 頁	 GRI 永續報告準則 國立高雄科技大學的永續報告書，參考 GRI 1-GRI 3 適用準則及 GRI 200 系列、GRI 300 系列及 GRI 400 系列的主題準則，符合應揭露事項的要求。 限制 國立高雄科技大學的財務報告由中華民國(台灣)監稅院審計師所審定。揭露數據包含類別一及類別二，且為自行估算未經第三方查證。 國立聲明與職能 TUV NORD 集團是監督、測試與認證的領導者，在全球超過 150 個以上的國家經營事業與提供服務，服務內容包含管理系統與產品證明：品質、環安衛、社會與道德審核及訓練：企業永續報告確信。 TUV NORD 與國立高雄科技大學為相互獨立的組織，查證行永續報告書查證時與國立高雄科技大學或其任何附屬機構與利害關係人並無利益衝突，關於國立高雄科技大學的永續報告書，TUV NORD 依據與國立高雄科技大學議定的查證範圍進行確信，不負有或承擔任何有關法律或其他之責任，預期使用者對於報告書內容的任何問題，由國立高雄科技大學負責回應。 查證團隊由 ISO 9001、ISO 14001、ISO 14064-1、ISO 14067、ISO 45001、SA 8000、ISO 50001、ISO 27001 等經驗豐富的主任師審員組成，並受過 AA1000 AS v3 當責性訓練的 CSAP 查證執照資格認證，查證團隊根據其資格、應得的知識以及產業的經驗，於本委託保證中提供專業意見。 本聲明書與英文版本在翻譯上的差異性時，請以英文版本為準。 Jack Yeh 總經理 簽發日期：2025 年 11 月 05 日 台灣德商北德技術服務顧問股份有限公司 台灣 10669 台北市民權南路 2 段 333 號 9 樓 AI 室  第 3 頁，共 3 頁
--	--	--



國立高雄科技大學
National Kaohsiung University of Science and Technology

2024 Sustainability Report