

2023 NKUST SUSTAINABILITY REPORT



National Kaohsiung University of
Science and Technology



CONTENTS



About This Report

02

Message from the President

03

Everlasting Sustainable Glory

04

CH1 Sustainable Vision

05

- 1.1 About NKUST 06
- 1.2 Vision for Academic Development 09
- 1.3 Sustainable Concepts and Action Strategies 10
- 1.4 School Data 11
- 1.5 Material Topics and Stakeholders 12

CH2 University Affairs and Governance

23

- 2.1 Diversified Governance 24
- 2.2 Advocacy and Collaboration 32
- 2.3 Workforce Diversity 34
- 2.4 Gender Equality Issues 37
- 2.5 Grievance Mechanism 39
- 2.6 Campus Safety 40
- 2.7 Occupational Safety and Health Management 41
- 2.8 Information Security 45

CH3 Cultivation of Innovative Talents

47

- 3.1 Admissions and Financial Aid 48
- 3.2 Sustainable Education 53
- 3.3 Campus Sustainability Practices 57
- 3.4 Sustainable Product Development 58
- 3.5 Academic Performance 59
- 3.6 Teaching Quality Assurance 65
- 3.7 Academic and Ethical Integrity 68
- 3.8 Career Counseling and Performance of Graduates 69

CH4 Social Inclusion and Practice

73

- 4.1 University Social Responsibility 74
- 4.2 International Exchange 76
- 4.3 Resource Sharing 78
- 4.4 Barrier-free Campus 81
- 4.5 University Historical Buildings and Open Space 81

CH5 Green University

83

- 5.1 Smart Campus 84
- 5.2 Energy and Carbon Management 85
- 5.3 Air Quality and Environmental Monitoring 88
- 5.4 Water Stewardship 89
- 5.5 Waste Management 90
- 5.6 Green Energy Transportation 91
- 5.7 Campus Ecology 93
- 5.8 Green Building 94
- 5.9 Green Procurement 94

Appendix

Sustainability Performance Summary Table 96

STARS Index 101

SASB:Education Index 98

GRI Index 104

SDGs Index 99

Third Party Assurance Statement 107



About This Report

The National Kaohsiung University of Science and Technology released the 2023 Sustainability Report (hereinafter referred to as the Report) in December 2024. Through the compilation of this report, we respond to the United Nations Sustainable Development Goals (SDGs) and disclose our university's relevant performance in teaching, research, environment, social participation, and governance, providing a reference for all stakeholders.

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.'

Boundaries and Scope

The information described in the report covers the National Kaohsiung University of Science and Technology. Furthermore, the financial information 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). For further reference, please visit NKUST's School Information Disclosure Website.



School Information
Disclosure

Restatements of information

This report has been revised to include 12 material topics (excluding S11 Stakeholder Communication).

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, 2023, to December 31, 2023. For information related to teachers and students, the disclosure range is the 2022/2023 academic year (from August 1, 2022, to July 31, 2023). To ensure comprehensiveness, certain data encompasses information predating 2023 or includes the most recent information available as of 2024.

Confirmation and Verification

NKUST has appointed TÜV 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.

Quality Management Process

Step	Item	Description
Step 1	Committee Formation	To promote the assessment of sustainable performance in various units, a Sustainable Development Report Compilation Committee has been established, comprising six working groups: University Affairs and Governance Group, Scientific Research and Innovation Group, Cross-Disciplinary Empowerment Group, Placemaking and Social Care Group, International Development Group, and Campus Progression Group. Additionally, several executive secretaries have been appointed to assist in tracking the progress of report compilation and data consolidation.
Step 2	Impact Assessment	Distribute questionnaires to stakeholders, identify material topics, and prioritize the reporting order based on their impact significance.
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.
Step 4	Report Review	The report was reviewed by the Sustainable Development 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	The report has been finalized by the Sustainable Development Report Compilation Committee and is set for publication.

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 2024

Previous Date of Issue: December 2023



Feedback

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Message from the President

Since its formative merger, National Kaohsiung University of Science and Technology has made becoming a sustainable university its core operational goal. Its educational mission is to cultivate talent with a focus on the 'WISH' concept - Whole Person, International Mobility, Sustainability Learning, and Humanity. Within this context, the cultivation of humanity plays a crucial role in the integration of sustainable development knowledge into each individual's respective field, as well as in the actualization of sustainability learning. Therefore, as a higher education institution dedicated to nurturing talent for Taiwan's business world, NKUST is built on a rich foundation of specialist training resources with an emphasis on the health and balanced development of its students. It puts its educational ideals into practice through the establishment of a campus system, shaping an atmosphere that encourages the pursuit of knowledge, and gathering and injecting necessary resources. Throughout all of this is embedded a spirit of sustainability.

Among its various efforts, the most important is ensuring educational opportunities for economically disadvantaged students. This not only fulfills the goal of SDG 4 but also enables the accomplishment of various sustainable development goals through education, ultimately bringing the realization of a more equal world one step closer.

•NKUST provides scholarships to students from economically disadvantaged backgrounds. In addition to continuing the traditional scholarships of the three schools that came together to form NKUST (the Love and Fulfillment, Chun-Yang, and Hand in Hand Scholarships), it also offers the 3Q's Scholarship provided by the 3Q's Scholarship Association, the Fu-Jen Scholarship provided by the Fu-Jen Education Sustainability Foundation (courtesy of alumnus Cheng Fu-Jen), and scholarships funded by the generous donations of alumni to our long-term endowment (courtesy of alumni Chen Cheng-Cheng Tsai Chiang-Tung). In this way, NKUST alumni and the general public generously provide opportunities for underprivileged students to transform their lives through rigorous specialist training rooted in vocational education. Ensuring adequate educational resources is crucial to safeguarding the right to education for these students.

•International opportunities for Taiwanese talent require the accumulation of exchange experiences and foreign language proficiency during their time in school. NKUST is deeply committed to cultivating talent for industries in the south. In addition to mobilizing and investing its own funds, it actively seeks to establish mutually beneficial partnerships to expand student access to language learning resources. Specific efforts to this end include:

1.The annual SOAR Study Abroad Summer Overseas Language Camp, a month-long English-immersion camp, which has consistently demonstrated its effectiveness in significantly boosting students' language proficiency. Upon their return, participants demonstrate a heightened motivation for continued learning. The SOAR Study Abroad Camp also provides additional grants for students from economically disadvantaged backgrounds, with the largest grant covering the full cost of participation.

2.A partnership with Wenzao Ursuline College of Languages, a leading institution in southern Taiwan specializing in language education. In addition to the English, Japanese, and German language resources provided by NKUST's College of Foreign Languages,

students also gain access to resources for additional foreign languages such as Spanish and French through this partnership.

•To instill confidence in future employment prospects for students with disabilities, NKUST organizes experience-sharing events. These events provide opportunities for all individuals to showcase their talents and inspire marginalized groups to contribute their expertise and engage in society with confidence.

NKUST has also established numerous groundbreaking records in gender equality issues. We strive to demonstrate an open, free, diverse, and inclusive environment. Within the campus, we have responded to the increasingly open and equal trend in society by promoting a firm belief in equality among faculty, staff, and students. This has been achieved through various approaches, including establishing a sound system (Gender Equality Committee), creating an inclusive environment (gender-neutral restrooms), and conducting social education through information dissemination (event organization and concept promotion). These efforts encourage and deepen the spirit of humanism based on mutual respect. The same humanistic spirit is also being implemented in the increasingly internationalized campus, simultaneously promoting the equality of diverse religions and races. This includes providing a prayer room for Muslims and applying food expertise to assist in obtaining Halal certification.

Furthermore, in terms of environmental sustainability, NKUST has continuously invested human and material resources to improve various management measures in stages, enhancing management efficiency to align with sustainable trends. This includes comprehensively promoting online operations for all business activities, reducing paper document circulation and obtaining a large amount of management data to serve as a reference guide for further optimizing management measures; planning inter-campus shuttle buses to promote carpooling, thereby reducing carbon emissions generated by inter-campus travel; implementing smart classroom management to enhance space utilization efficiency and provide electricity based on borrowing schedules, minimizing energy waste; and establishing an ecological pond that serves both flood control and wastewater recycling functions, reducing wastewater discharge while providing a symbiotic and thriving ecological environment for various birds, insects, and plants. Numerous initiatives aimed at directly reducing emissions or leveraging innovative management mechanisms to minimize carbon emissions generated by campus operations represent NKUST's commitment to environmental sustainability. As the largest technological university in the country, NKUST believes that environmental sustainability and sustainable development that considers diverse values are essential tasks that must be undertaken concurrently in the pursuit of a sustainable future.

NKUST inherits the profound educational assets of three southern industrial universities. The opportunity of the merger allows NKUST to fundamentally establish a framework and vision for a future university. It aims to embody the spirit of equality in the future world within campus life, enabling future talents to learn and grow in an equal and free environment, becoming a member who will put the spirit of sustainability into practice in the future.

President of NKUST

Yang Ching-yu

December, 2024





Everlasting Sustainable Glory



- In the QS World University Sustainability Ranking, NKUST achieved a global ranking of **542nd**, **122nd** in Asia, **11th** in Taiwan, and **3rd** among Taiwanese universities of technology.

- The 2023 TCSA Taiwan Corporate Sustainability Awards recognized the 'University Sustainability Report' with a **Silver Award**.

- 2023 TSAA Taiwan Sustainability Action Awards:



13 Gold: 'Sustainable Hometown: Taro and USR'

12 Silver: 'Neighborhood Coast Local Revitalization Plan'

4 Bronze: 'University's Social Responsibility for Drowning'



13 Silver: 'Smart Oversight for Environmental Regeneration'

12 Bronze: 'Spring Swallows Nesting: Local Revitalization'

- National Environmental Education Award - Kaohsiung City, Special Excellence

- Kaohsiung City Environmental Protection and Sustainability Contribution Award - Sole Award Recipient in the Education Category

The awards were presented by Mayor Chen Chi-Mai



Survey by Global Views Monthly

- In the '2023 Taiwan Best University Rankings,' the university ranked 5th in the technological and vocational category. It also ranked 2nd among technical universities in terms of SDGs contribution, 2nd in financial health, and 3rd in industry-academia collaboration.
- In the '2023 Corporate's Favorite University Student's Survey,' the university ranked third in the technological universities category and ranked 8th among national universities.

Survey by Commonwealth Magazine

'CommonWealth USR University Citizens - Public Vocational College Groups' has been ranked in the top 5 for 4 consecutive years from 2020 to 2023.

Survey by Cheers Magazine

Ranked 3rd nationally and 1st among the top technological universities in the southern region in the 'Corporate's Favorite University Student's Survey' for 6 consecutive years from 2018 to 2023.

The project 'Innovative Path'

Realizing the Sustainable Value of Grouper Byproducts from Yong'an' has been awarded the Three-Star Award in the University Division of the USR Sustainable Innovation category at the 2023 5th Food Innovation Award.

Educational Performance and Recognition

NO.2 World's Top 2% Scientists 2022

51 teachers from NKUST were listed, ranking 10th among national universities and 2nd among technological universities in 2023.

NO.1 Youth Development Administration, Ministry of Education U-start Innovation and Entrepreneurship Program

In 2023, NKUST had 6 outstanding teams in the first phase of the Innovation and Entrepreneurship Program, receiving a total of NT\$3 million in entrepreneurial awards, ranking first among national technological universities in southern Taiwan.

NO.2 Ministry of Education's Subsidy for Higher Education SPROUT Project

Received a subsidy of NT\$397.18 million in 2023, ranking 9th nationwide and 2nd in the technological universities category.

NO.1 The Ministry of Education's University Social Responsibility Implementation Program (USR)

5 projects were approved in 2023, with a total subsidy of NT\$32.8 million for two years (2023-2024), ranking first nationwide.

NO.1 The Ministry of Education's Subsidy for Higher Education Teaching Practice Research Program

The Ministry of Education has approved 65 projects for the Teaching Practice Research Program in higher education institutions in 2023, receiving a grant of NT\$19,171,190, ranking 1st nationwide and 1st in the technological universities category.

NO.1 Research Grant for University Students Approved by the National Science and Technology Council

In 2023, 101 projects were approved, ranking the school 1st among technological universities and 6th among national colleges and universities.

NO.2 The Ocean Affairs Council's Subsidy for University Student Research Projects

The council has approved 4 research projects for college and university students under the Special Research Program. The total funding allocated is NT\$410,000, ranking 2nd in terms of the number of approved projects and total funding amount in the country for the year 2023.

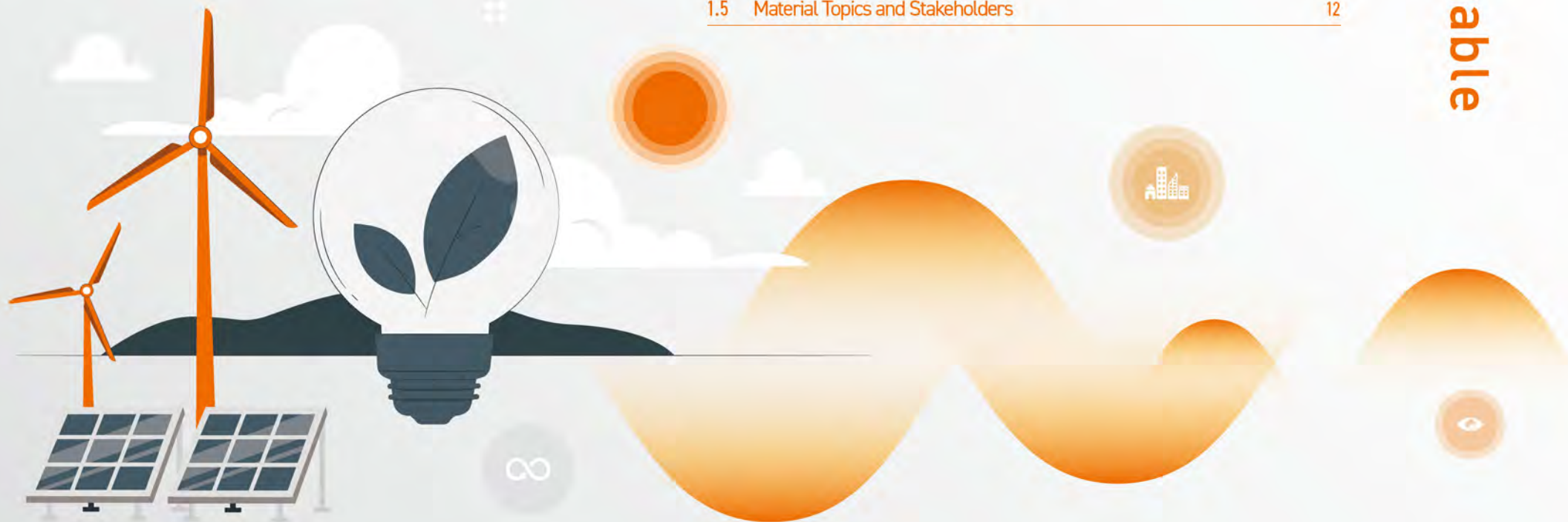
- The College of Management at NKUST has been approved for funding as a key institution for the Ministry of Education's '2023 Bilingual Learning Program for Universities and Colleges.'
- NKUST has been awarded the Outstanding School Award in the 10th Ministry of Education Arts Education Contribution Awards in 2023.



01.

Sustainable Vision

1.1	About NKUST	6
1.2	Vision for Academic Development	9
1.3	Sustainable Concepts and Action Strategies	10
1.4	School Data	11
1.5	Material Topics and Stakeholders	12





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. Under the careful planning of successive presidents and the diligent efforts of the entire faculty and students, our university has continued to thrive and has grown into a first-class institution with distinctive features and an international perspective.

1.1.2 Campus Scope and Services

NKUST currently has five campuses, namely 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. These campuses provide students with a high-quality and diverse learning environment.

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 to exchange ideas. In 2023, a total of 1,831 high school and vocational school students visited our campus.

Jiangong
Campus

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

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.

Yanchao
Campus

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

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.

First
Campus

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

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.

Nanzih
Campus

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

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.

Cijin
Campus

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

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.



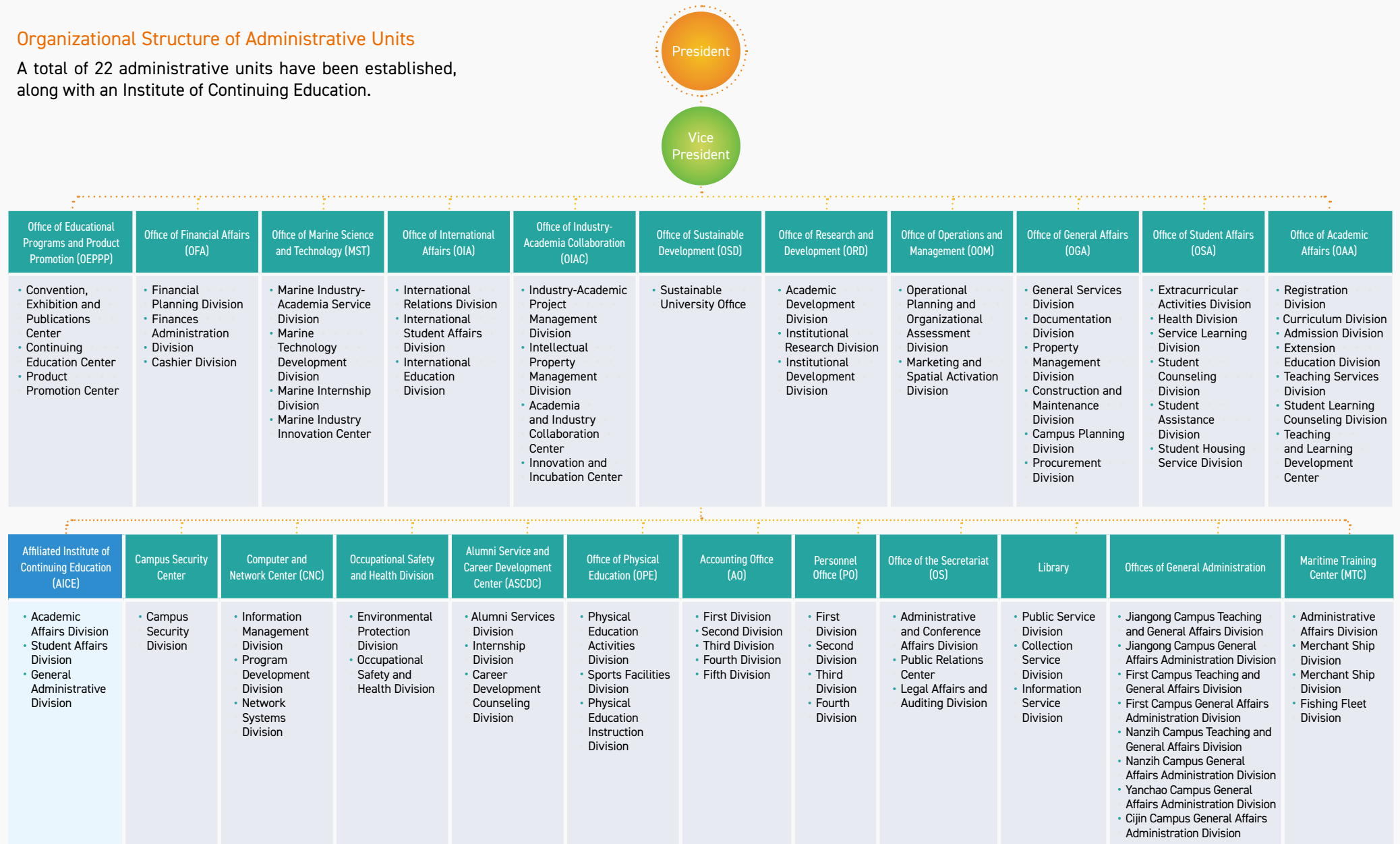


1.1.3 Organizational Structure

The administrative and academic units operate according to the 'Organizational Regulations' passed at the 4th University Council of the 2022/2023 academic year of this university on June 28, 2023. The organizational structure is described as follows:

Organizational Structure of Administrative Units

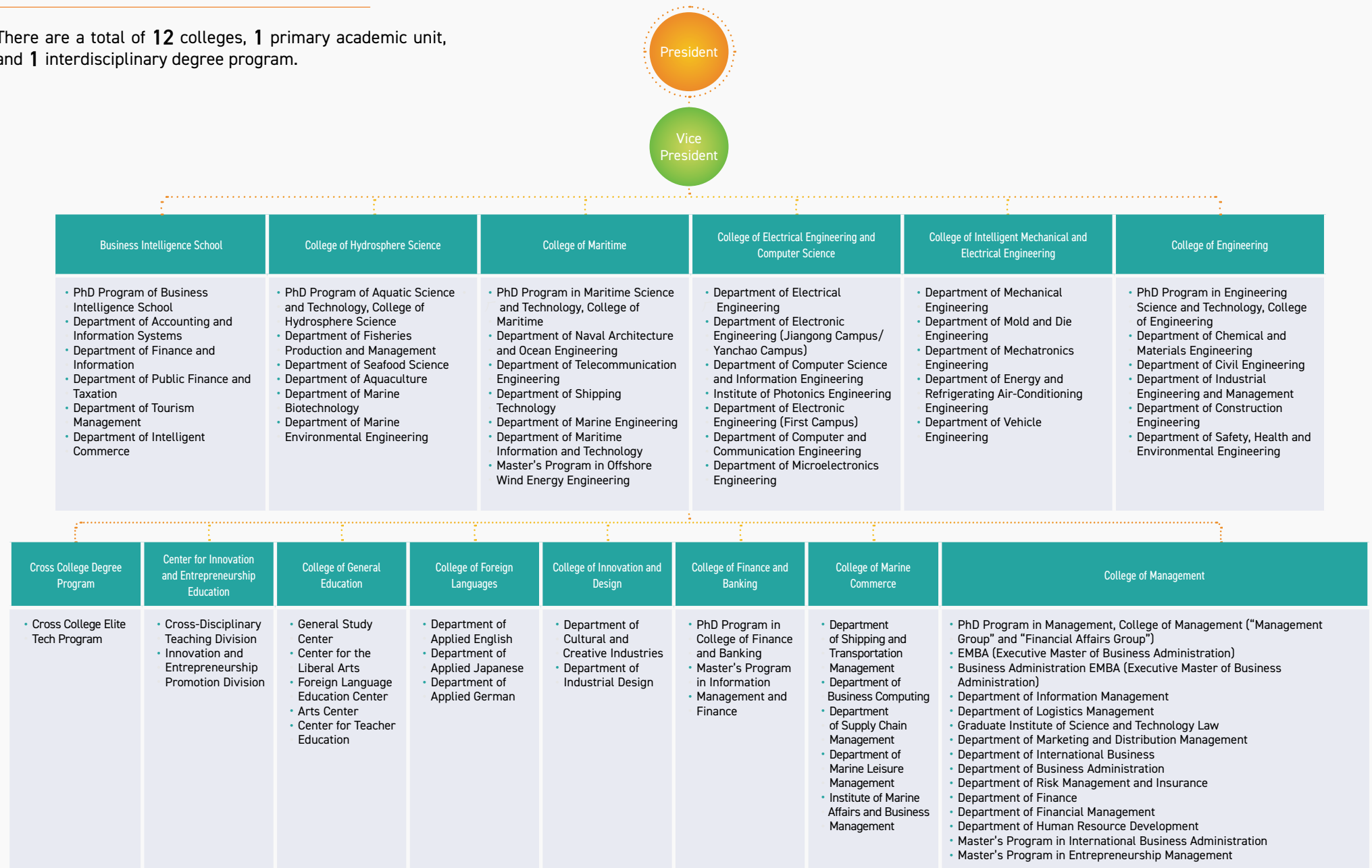
A total of 22 administrative units have been established, along with an Institute of Continuing Education.





▼ Organizational Structure of Academic Units

There are a total of **12** colleges, **1** primary academic unit, and **1** interdisciplinary degree program.





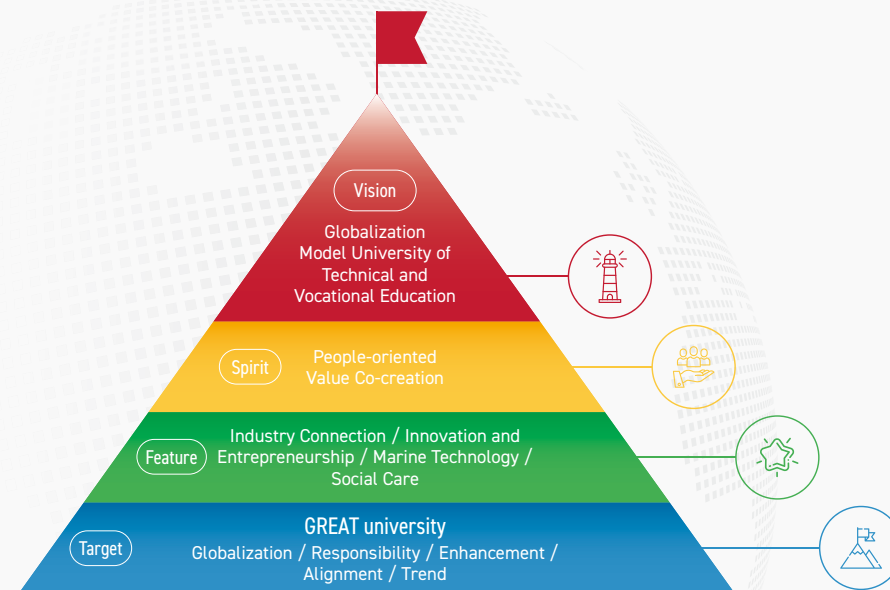
1.2 Vision for Academic Development

▼ Unique Features of NKUST

Our university is characterized by four main features: industry connection, innovation and entrepreneurship, marine technology, and social care. In addition to upholding the founding principles of the three original schools, we prioritize global sustainable development goals and integrate them into our four main features. We have long-term connections with regional industries and a strong industrial foundation in electrical engineering, which defines our industry connection feature. In response to global trends, we actively promote education in innovation, smart business, and interdisciplinary practical courses, emphasizing students' innovation, practical, interdisciplinary, and employability skills. This represents our innovation and entrepreneurship focus. We house the most comprehensive marine technology-related departments, establishing a high-quality and complete foundation for industry-academia research and development in marine technology. As the only vocational university in the country cultivating marine professionals, we distinctly represent the essence of marine technology. As global citizens, we embrace the responsibility of global sustainable development and actively integrate it into our academic pursuits, embodying our commitment to social care.

▼ Development Vision

Our university boasts several strengths: a sincere and straightforward campus culture, diverse academic departments, exceptional teaching and research, and noteworthy achievements by our alumni. We have evolved into a dynamic institution, committed to leveraging these strengths continually, fostering exceptional vocational talents. We aim to propel the growth of industries and enterprises in the southern region, while also leading as a catalyst for societal, national, and global sustainable development. 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 its use for the SPROUT Project, industry-academia collaboration, enhancing the public nature of higher education, and fulfilling social responsibilities, the Institutional Research Support System serves as the foundation for promoting the school's sustainable development and fostering a positive cyclical ecosystem.

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, achieving precise decision-making based on academic data to address the requirements for sustainable development within educational institutions. At the same time, in response to advocating openness within the SPROUT Project, we aim to compile critical research topics for stakeholders. These summaries will emphasize key findings and be published on our university's website for public reference.



• School Information Disclosure



1.3 Sustainable Concepts and Action Strategies

Based on the SDGs 17 partnership, our university integrates internal and external resources to advance the practice of university 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.



▼ Sustainable Action Strategy of NKUST

· Sustainable Values of NKUST

Values

Foresight

Action Strategy

The transformation of our sustainable mission, transitioning from BEST to GREAT: Not only embracing BEST as our sustainable vision but also integrating the Sustainable Development Goals (SDGs) into our mid-term plan to evolve into a GREAT university.

Sustainable operations achieving net zero carbon emissions: Establishing sustainable investment guidelines and implementing audit mechanisms.

Establishing a solid foundation for sustainable development: Promoting cross-departmental sustainability communication within the university, and building strong partnerships through the establishment of alliances, policy formulation, and leading by example.

Organization

The carbon reduction solution for multiple campuses: The General Administration Division ensures efficient resource integration, reduces paper printing and staff movement, effectively reduces carbon emissions and resource waste, and the standard SOP enhances team administrative efficiency.

Focusing on sustainable development: The creation of the Office of Sustainable Development and the Office of Operations and Management aims to ensure ongoing enhancement of the school's sustainability. These offices will conduct regular assessments to identify and rectify any shortcomings.

Responsibility

Not only providing emergency assistance but also supporting the underprivileged: Ensuring the rights and development of vulnerable groups on campus by establishing and providing software and hardware services, fostering interdisciplinary collaboration among industry, academia, and research.

Harnessing the power of universities as a social responsibility: Through the implementation of projects, long-term organizational operations, service, and guidance, effectively extending school resources to local communities, and embedding the concept of sustainability in society.

Coordination

Cross-domain collaboration in the spirit of sustainability: Creating an environment and opportunity for interdisciplinary communication for teachers and students, with a special emphasis on cultivating empathy in the context of sustainability, to achieve sustainable collaboration at the operational level.

Utilize technology to empathize with stakeholders: Design appropriate channels for dialogue, analyze the important issues that all stakeholders are concerned about, promote self-improvement within the school, and enhance contribution.

Expansion

Opportunities for a sustainable smart campus: Many of the systems are developed by our own faculty, with low cost and high efficiency. These systems can be expanded to other schools through experience sharing, collectively shaping a green and energy-efficient campus.

Creating a sustainable and shared future: Through event organization, mentoring programs, digital platform development, or book publishing, we aim to share the sustainable achievements of our school and promote mutual prosperity with external organizations.



1.4 School Data



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 Center¹

537.62 /square meters

Floor area of energy-intensive facilities²

43,339.94 /square meters

Number of colleges³

12

Number of departments⁴

49

Number of independent institutes⁵

3



Number of school-level research centers

19



Number of college-level research centers

40

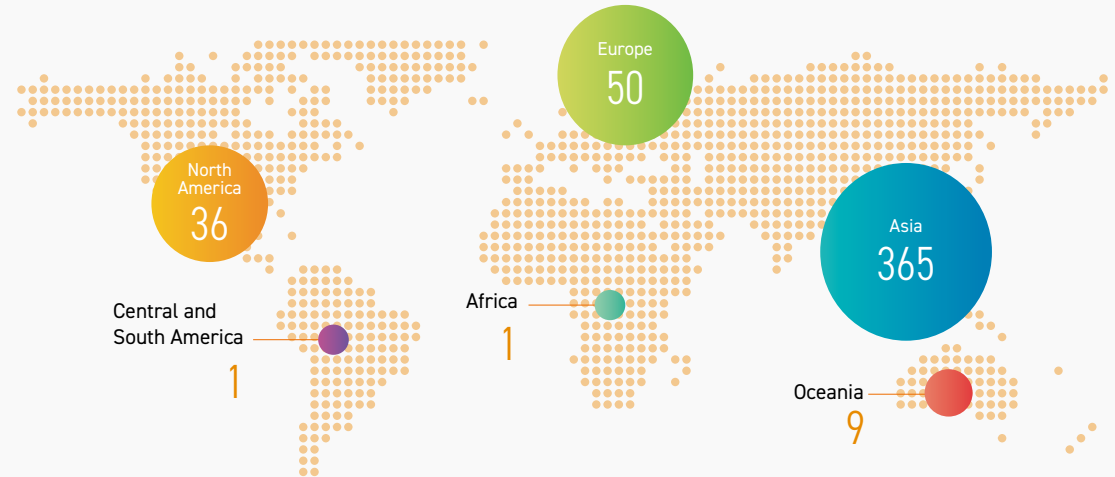
Total number of staff and faculty⁶

3,370

Total number of students⁷

28,069

Number and distribution of sister universities: a total of 461



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 of university-level sister school agreements

748



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

² According 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.

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

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

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

⁶ Including full-time faculty, part-time faculty (0.2 FTE), regular staff, university-endowed staff, project-based employees, project researchers, and part-time assistants (0.2 FTE).

⁷ As of October 15, 2023, the calculation includes doctoral programs, master's programs, four-year technical programs, two-year junior college, five-year junior college programs, and in service master's programs.

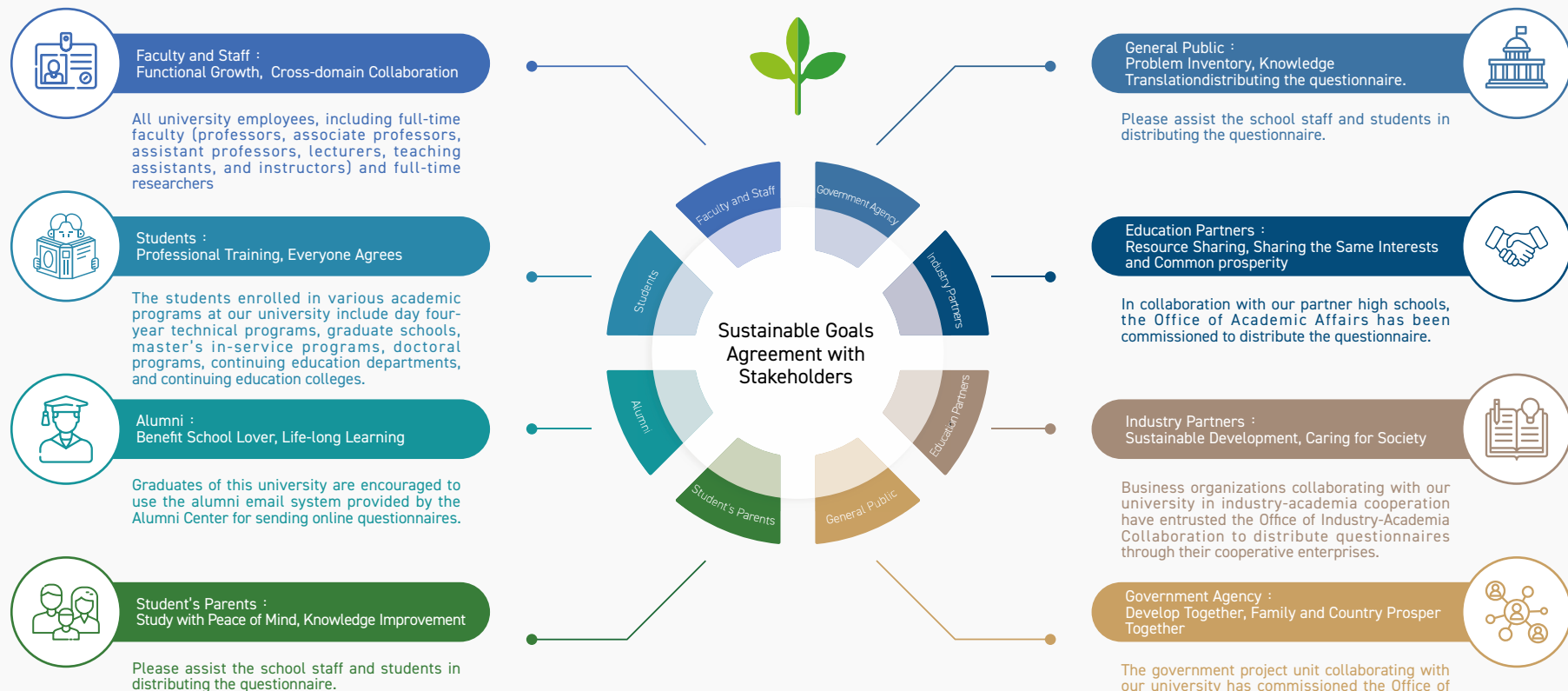


1.5 Material Topics and Stakeholders

Beginning in 2023, NKUST has been conducting materiality analysis on sustainability issues in accordance with the requirements of the GRI Standards (GRI Standards 2021). Through a questionnaire survey, we gather stakeholders' expectations and feedback to facilitate the evaluation of the achievements of our campus's sustainable development culture. By identifying material topics based on 'stakeholder concern' and 'operational impact,' we have established a framework for the compilation of our university's sustainable development report. Simultaneously, we have employed impact assessment methodologies proposed by organizations such as the Value Balance Alliance (VBA) and the Harvard Business School's 'Impact-Weighted Accounts' research project to evaluate NKUST's positive and negative impacts on sustainable development. This serves as the basis for our disclosure of double materiality. Moreover, our university has established a biannual materiality analysis frequency, based on the significance analysis, our university has calibrated its sustainability goals and strategies, establishing a foundation for annual reviewing and enhancing the effectiveness of our social responsibility initiatives. In collaboration with stakeholders, we aim to build a sustainable future for mutual benefit.

Stakeholder

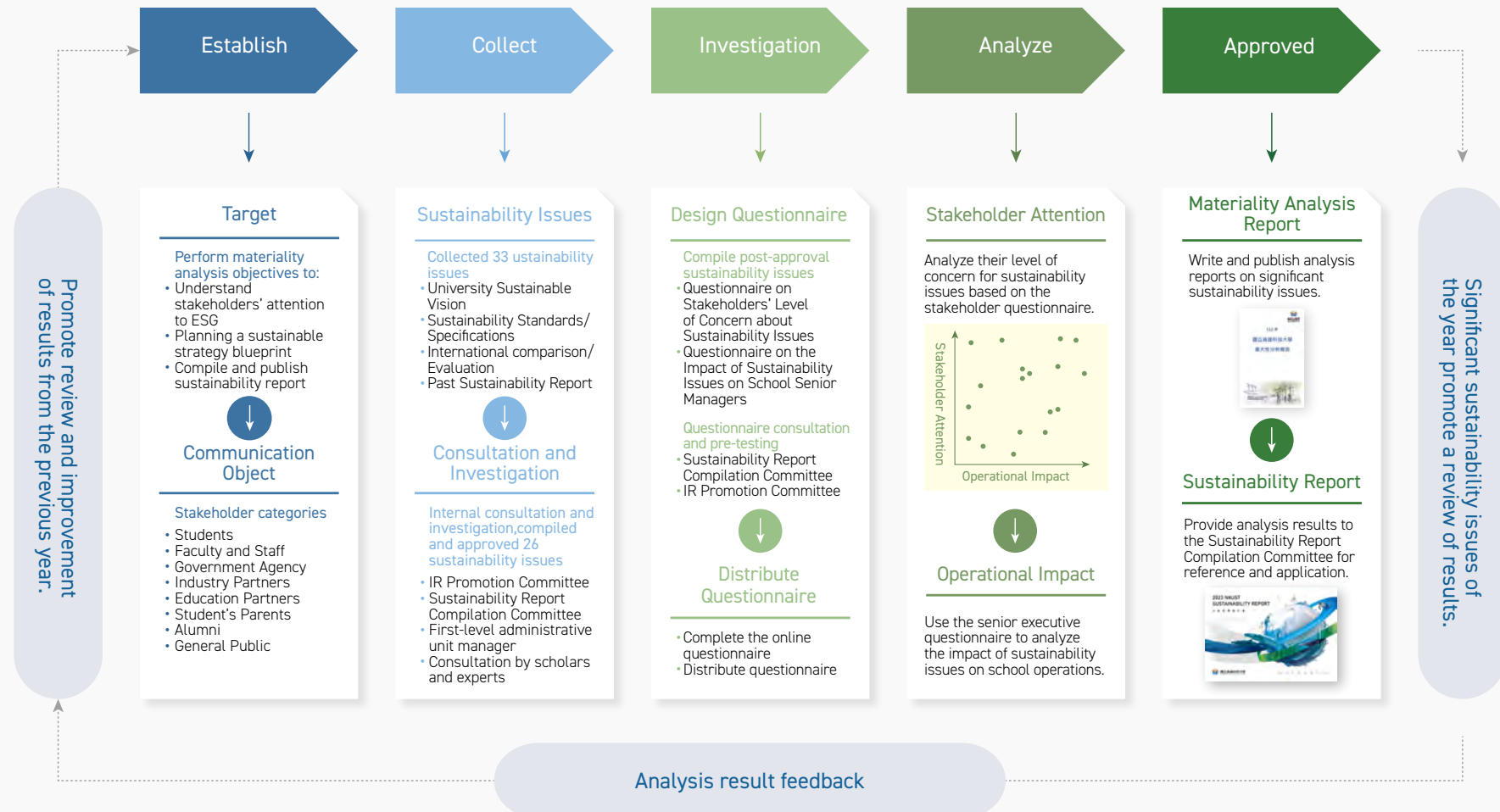
Stakeholders refer to internal or external groups or individuals who have an impact on the operation, teaching and research, environment, and society of our university, or who are affected by our university. Through the consultation process with the Sustainable Development Report Compilation Committee and the heads of primary administrative units, the relevant 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 stakeholders are as follows:



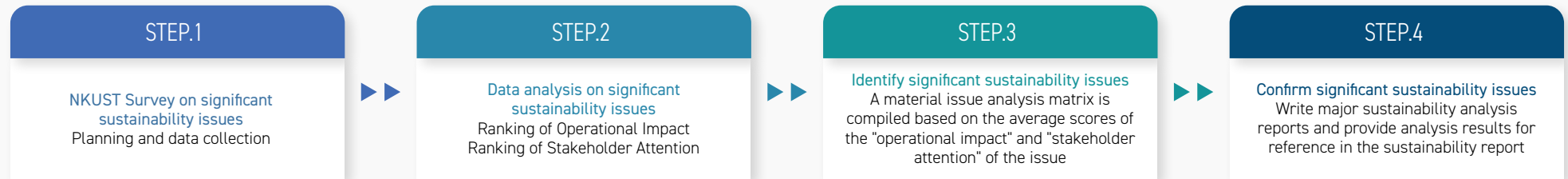
· Identification Structure of Material Topics

1.5.1 Identification of Material Topics

In order to comprehensively collect, examine, and respond to 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 stakeholders and 11 senior executives participating in questionnaire responses, 12 material topics were selected. These topics are then reported to stakeholders in order of their significant impact.



Identification Structure of Material Topics



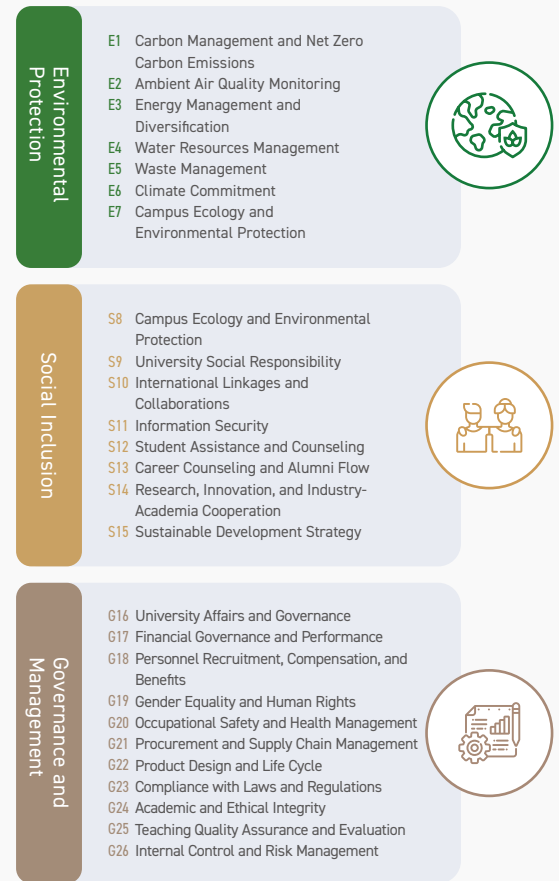
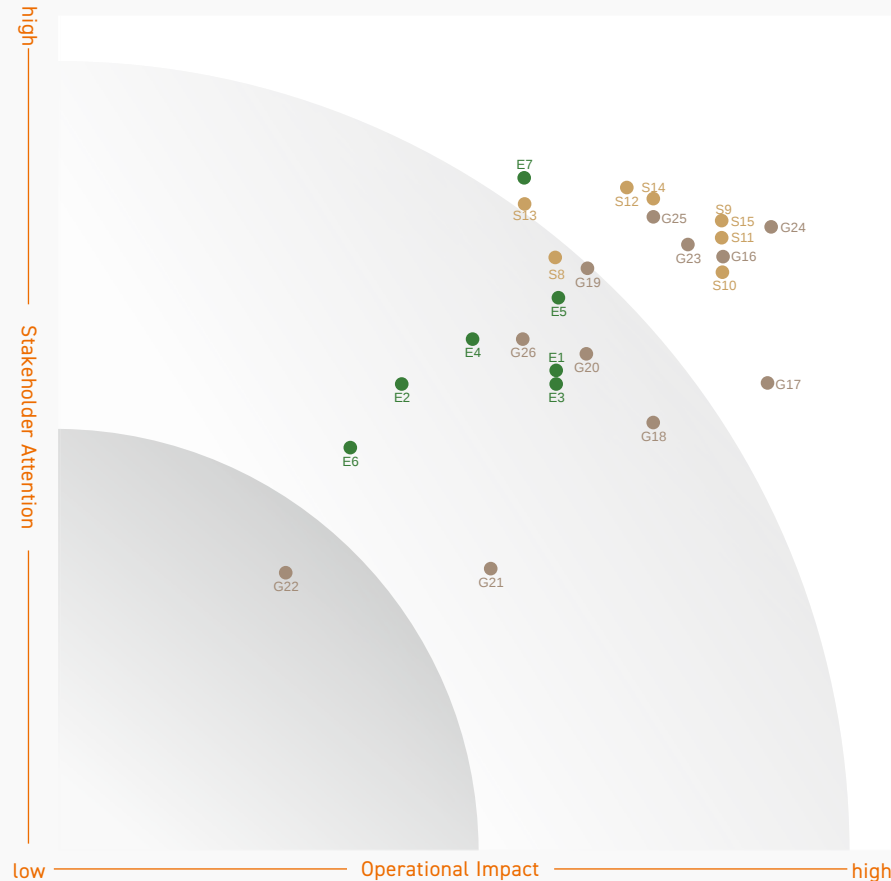
· Process for Material Topics

Based on the aforementioned identification process, the university defines a material topic as a sustainability issue highly concerning to the university's stakeholders and evaluated to have a significant impact on the university's operations by the senior executive decision-making committee. Based on the aforementioned principles, a total of 12 issues have been prioritized and defined as material topics. Furthermore, 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:

1.'Environmental Protection':
including Campus Ecology and Environmental Protection.

2.'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.

3.'Social Inclusion':
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



Sustainable Development Impact Assessment Framework at NKUST

Aspect	Impact Items	Attributes	Possibility	Severity	Remedial	Sustainability Issues with Significant Impact	Corresponding Chapter
Environmental Aspects	The goal is to become a carbon-neutral university	Positive	Medium	High	-	Carbon Management and Net-Zero Carbon Emissions	5.2 Energy and Carbon Management
	Implementation of a Smart Energy Management System to Enhance Energy Efficiency	Positive	High	Medium	-	Energy Management and Diversification	5.2 Energy and Carbon Management
	Wastewater and Waste Discharge Pollution	Negative	Medium	Medium	High	Water Stewardship Waste management	5.4 Water Stewardship 5.5 Waste Management
	The Cyclical Utilization and Conservation of Coexistence in the Campus Ecological Pool	Positive	High	High	-	Campus Ecology and Environmental Protection	5.7 Campus Ecology
Human Rights Aspects	Encouraging international exchange and broaden perspectives	Positive	Medium	Low	-	International Linkages and Cooperation	4.2 International Exchange
	Publish a sustainability report to showcase NKUST's sustainability achievements and performance	Positive	High	Low	-	Sustainable Development strategy	1.3 Sustainable Concepts and Action Strategies
	Strengthening support mechanisms for disadvantaged students	Positive	Medium	Medium	-	Student Academic Support and Counseling	3.1 Admissions and Financial Aid
	Assisting communities in resolving issues and fulfilling social responsibility	Positive	Medium	Medium	-	Social Engagement and Local Care University Social Responsibility	4.1 University Social Responsibility
	Failure to report sexual harassment incidents in accordance with regulations and negatively impact NKUST's reputation	Negative	Medium	Medium	High	Gender Equality and Human Rights	2.4 Gender Equality Issues
	Information Security Issues Leading to the Leakage of Personal Data	Negative	Medium	Medium	High	Information Security	2.8 Information Security
Economic Aspects	Transparency in Disclosing Information About Its Operations	Positive	High	Low	-	University Affairs and Governance	2.1 Diversified Governance
	Integrate Administrative System Functions to Enhance Service Efficiency	Positive	High	Low	-	University Affairs and Governance	2.1 Diversified Governance
	Failure to Apply for Research and Development Results or Technical Patents in Accordance with Regulations	Negative	Medium	High	Medium	Research, innovation, and Industry-academia Collaboration	3.5 Academic Performance
	Investment Losses Due to Changes in the Financial Environment	Negative	Low	High	Medium	Financial Governance and Performance	2.1.3 Financial Information
	Promoting Innovative Teaching Methods to Address Challenges in Classroom Instruction	Positive	High	Low	-	Teaching Quality Assurance and Evaluation	3.6 Teaching Quality Assurance
	Incidents of Academic Plagiarism has Occurred, Impacting the Reputation of NKUST	Negative	Medium	Medium	High	Academic and Ethical Integrity	3.7 Academic and Ethical Integrity



The Importance of the School's Industry Context and the Impact of Major Themes⁸

SASB: Education	Material Topics for Reporting	SDGs	STARS	GRI	The University's Mid-term School Development Plan for the 2022-2025 Academic Years	Significance to NKUST	The Impact on Stakeholders (Direct ● / Indirect ▲)	Corresponding Chapter
-	Campus Ecology and Environmental Protection	  	AC-5 OP-1 OP-3 OP-4 OP-10	GRI Customized Topics Ecology and Environmental Protection	R1 Constructing an Environmentally Friendly and Sustainable University E3 Promoting the Overall Revitalization of the Campus	Campus identity is an ideological shaping process that molds the campus to have humanistic characteristics, creating an inclusive and friendly campus environment that embodies both humanism and ideology.	● Faculty and staff, students ▲ The general public	3.3 Campus Sustainability Practices 5.7 Campus Ecology
-	Student Awards and Counseling	  	PA-7	GRI Customized Topics Student Academic Support and Counseling	R2 Promoting a social responsibility support system A4 Enhancing Research Capability and Improving Quality	Establish a sound reward and subsidy mechanism to enhance students' motivation to obtain professional certifications, strengthen their professional foundation, and enhance academic competitiveness.	● Faculty and staff, students, government agencies ▲ Education Partners	3.1 Admissions and Financial Aid
-	Research, innovation, and Industry-academia Collaboration	      	AC-9	GRI Customized Topics Academic research quality	A1 Expanding cross-domain integration of industry-academia research and development A2 Cultivating an innovative entrepreneurship ecosystem A3 Developing the main characteristics of the marine profession T1 Cultivating future talents through innovative teaching T4 Development of forward-looking technology applications research	Combine the research and development capabilities and resources of the industry and academia, seeking government initiatives, developing industrial technology, nurturing industry talents, and assisting in the upgrading of key industries in the region.	● Faculty and staff, students, industry partners, government agencies ▲ General public, education partners	3.5 Academic Performance
SV-ED-260a.1 SV-ED-260a.2 SV-ED-260a.3 SV-ED-000.A SV-ED-000.B SV-ED-000.C	Teaching Quality Assurance and Evaluation		AC-1 AC-2 AC-3 AC-4	GRI Customized Topics Teaching Quality and Effectiveness	A4 Enhancing Research Capability and Improving Quality T1 Cultivating future talents through innovative teaching T3 Enhancing competitive advantage in retention and attraction of talent	To enhance human capital, establish teaching quality assurance, strengthen overall teaching and research capabilities, and promote competitive advancement and upgrading.	● Faculty and staff, students, government agencies ▲ Education partners, industry partners	3.2 Sustainable Education 3.6 Teaching Quality Assurance 3.8 Career counseling and performance of graduates
-	Sustainable Development strategy	      	PA-2	GRI Customized Topics Action Strategies of Sustainable Development	R1 Constructing an environmentally friendly and sustainable university	In response to the global focus on Sustainable Development Goals (SDGs) and the shared responsibility for global climate change, our university embraces the concepts of 'environmentally friendly' and 'sustainable development' as core principles in campus management and planning.	● Faculty and staff, students, the general public, government agencies ▲ Industry partners	1.3 Sustainable Concepts and Action Strategies
-	University Social Responsibility	 	EN-3 EN-10	GRI 413 Local Community	R2 Promoting a social responsibility support system	To deepen our university's role in 'serving society,' we will more actively promote a social responsibility support system, facilitating creative cooperation between the university and the local community for mutual benefit and prosperity.	● Faculty and staff, students, the general public, government agencies ▲ Education partners, industry partners	4.1 University Social Responsibility

⁸This table is prepared based on the 'SASB: Education 2018,' 'Linking the SDGs and the GRI Standards 2022,' 'United Nations Sustainable Development Goals (SDGs),' 'The Sustainability Tracking, Assessment & Rating System-2.2 (STRAS-2.2),' and 'Mid-term School Development Plan for the 2022-2025 Academic Years.'



SASB:Education	Material Topics for Reporting	SDGs	STARS	GRI	The University's Mid-term School Development Plan for the 2022-2025 Academic Years	Significance to NKUST	The Impact on Stakeholders (Direct ● / Indirect ▲)	Corresponding Chapter
-	Academic and Ethical Integrity		-	GRI Customized Material Topics Academic and Ethical Integrity	A4 Enhancing Research Capability and Improving Quality	Establishing a high-quality research paradigm is one of the missions of higher education, aimed at maintaining the reputation of our university and enhancing academic competitiveness.	● Faculty and staff, students, government agencies ▲ Education partners, industry partners	3.7 Academic and Ethical Integrity
SV-ED-230a.1 SV-ED-230a.2 SV-ED-230a.3	Information Security		-	GRI 418 Customer Privacy	E1 Enhancing administrative efficiency and service capability E4 Create smart campus information value-added services	Our university has the highest number of students among all the science and technology universities in the country. It is therefore crucial to maintain the operation, security, and stability of the school's administrative system. We achieve this by regularly updating and maintaining our information equipment to ensure the safe utilization of these devices by all faculty and students.	● Faculty and staff, students, government agencies ▲ Student's parents, education partners, industry partners	2.8 Information Security
SV-ED-270a.4	Compliance with laws and regulations		-	GRI Customized Material Topics Compliance with laws and regulations	T3 Enhancing competitive advantage in retention and attraction of talent	In response to regulatory trends, we aim to maintain the rationality of regulatory policies and achieve fairness and justice.	● Government agencies, industry partners ▲ Faculty and staff	
SV-ED-000.D	University Affairs and Governance		PA-1 PA-5 PA-6 PA-9	GRI Customized Topics Academic Development	E1 Enhancing administrative efficiency and service capability	Campus operations are crucial for the sustainable management and development of the university. The university is committed to promoting sustainable campus governance and enhancing competitiveness.	● Our school is committed to promoting sustainable campus governance to enhance competitiveness. ▲ Students, student's parents	1.2 Vision for Academic Development 2.1 Diversified Governance
-	International Linkages and Cooperation		EN-11	GRI Customized Material Topics International Linkages	G1 Deepening the Integration of Southbound Bases with the International Market G2 Strengthening international industry-research exchange and cooperation G3 Promoting multilingual and diverse learning in universities G4 Enhancing Global Influence and Visibility	By implementing a comprehensive internationalization strategy and executing various action plans, we aim to transform the previous impression of insufficient internationalization in vocational education and enhance the international competitiveness of vocational education in our country.	● Faculty and staff, students, education partner, industry partner ▲ Student's parents, government agencies	4.2 International Exchange
SV-ED-270a.1 SV-ED-270a.2 SV-ED-270a.3	Financial Governance and Performance	  	PA-10 PA-11	GRI 201 Economic Performance	E1 Enhancing administrative efficiency and service capability	By implementing professional management and transparent oversight mechanisms, we ensure the operational efficiency of the school's endowment fund to achieve sustainable business goals.	● Faculty and staff, students, alumni, student's parents, government agencies ▲ Industry partners	2.1 Diversified Governance



1.5.2 Material Topics Management Policy

Material Topics	Policy commitments	Short-term Goals	Medium to Long term goals	Executing Unit	2023 Implementation Status
Campus Ecology and Environmental Protection	Implement campus environmental maintenance, establish a smart energy management system, and optimize campus landscape facilities to create a welcoming and friendly campus environment.	- Every year, through official email, we strengthen the promotion of waste sorting on campus and advocate for waste reduction. - The air quality purification zone receives an assessment score of 80 or above from the Kaohsiung City Government Environmental Protection Bureau every year.	- Promote campus waste reduction management at the source and establish a smart energy management system to enhance energy efficiency. - Promote waste reduction on campus, in alignment with the School Development Plan, we aim to reduce waste generation by 5% and increase resource reclamation by 10% within a four-year period (2022-2025). - Maintain an average annual electricity savings rate of 1% or more on campus to enhance the energy efficiency of NKUST.	General Affairs Department Environmental Health and Safety Center	- Our university actively promotes waste sorting and advocate for waste reduction through official email every month. - An on-site inspection of the 2023 Air Quality Purification Zone was conducted by the Environmental Protection Bureau Kaohsiung City Government on May 26, 2023. The zone received a total score of 86 points, meeting the expected target.
Student Awards and Counseling	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.	- 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 500 professional certifications to enhance students' employability.	- 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.	Office of Student Affairs	The 'Learning in Lieu of Work-Study' program has awarded a total of 3,246 students from economically disadvantaged backgrounds, achieving its target.
Research, innovation, and Industry-academia Collaboration	In order to align with national industrial development policies, 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.	Innovative Research - Enhance the research capacity of teachers by improving the measures for research award subsidies. Industry-Academia Collaboration - A total of 600 industry-academia collaboration projects have been implemented university-wide to enhance the over all research and development capabilities.	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. - Every year, we complete 5 cross-domain or cross-school technical cooperation projects to develop innovative industries.	Office of Research and Development Office of Industry-Academia Cooperation	- To enhance faculty research capabilities, NKUST has established the following research award and subsidy measures: journal article incentives, project matching funds applications, academic conference subsidies, and new faculty subsidies. - In 2023, the number of industry-academia collaboration projects reached 782.
Teaching Quality Assurance and Evaluation	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.	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.	- Increase the teacher community subsidies by 10% within 4 years, increase the number of applications for the Ministry of Education's Teaching Practice Research Project by 5%, and increase the number of courses using innovative teaching methods by 10%. - The pass rate for academic units at the college or department level that apply for evaluation every year is 100%.	Office of Academic Affairs Office of Research and Development	In 2023, there were 62 grants for innovative teaching, 50 grants for problem-based and project-based learning courses, and 2 grants for Massive Open Online Courses (MOOCs), totaling 114 grants.
Sustainable Development strategy	Identify key themes, track, and evaluate the effectiveness of implementation through the establishment of specific sustainable development goals on a regular basis.	An annual sustainable development report is compiled, with the key issues of the report being revised based on global sustainability trend	Promote sustainability education by organizing relevant lectures and activities every year, aiming to achieve the goal of becoming a net-zero sustainable university.	Office of Sustainable Development	The National Kaohsiung University of Science and Technology compiles a Sustainability Report annually. In late 2023, the 2022 Sustainability Report was released, referencing international standards such as GRI and SASB:Education.
University Social Responsibility	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.	Incubate 10 teams for micro projects on social responsibility.	The incubated social responsibility micro-project teams have facilitated the creation of four outstanding cases.	Office of Industry-Academia Cooperation	Incubated 11 teams for micro projects on social responsibility in 2023.



Material Topics	Policy commitments	Short-term Goals	Medium to Long term goals	Executing Unit	2023 Implementation Status
Academic and Ethical Integrity	We are committed to upholding the principles of integrity, impartiality, and lawful administration and strive to maintain high standards of honesty and transparency in all aspects of our academic operations and decision-making processes.	✓ 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.	✓ 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.	Office of Academic Affairs Personnel Department	✓ The pass rate for graduate students completing the designated academic ethics courses reached 100%. ✓ On September 15, 2023, a training session titled 'Service Integrity Ethics from the Perspective of Legal Administration' was held in the 165-person conference room on the 4th floor of the Administration Building at the Yanchao Campus. A total of 55 individuals participated, and the session was simultaneously recorded and uploaded to the 'e-Government Service+ Learning Platform' for colleagues to access and review online at their convenience.
Information Security	The key to promoting information technology work lies in the stability of school information equipment and ensuring information security. To facilitate the smooth implementation of school-wide business informatization and achieve the secondary goal of enhancing administrative efficiency, a mobile action plan for information equipment maintenance and expansion is proposed to ensure stable and secure information.	✓ Replace network equipment type 1 to provide a stable campus network and enhance administrative service efficiency.	✓ 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.	Computer and Network Center	To enhance data transmission speed and administrative service efficiency, the network layout was optimized in 2023, improving wireless network coverage.
Compliance with laws and regulations	To strengthen talent recruitment and retention efforts, various talent incentive systems have been established, including the establishment of lectureships/special appointments/special outstanding research talents, as well as flexible salary incentive measures for teaching, counseling, and service talents, in order to enhance the career development of teachers.	✓ Regularly review regulations and policies each year to enhance the development of teachers' careers.	✓ Every year, in accordance with the development of school affairs and relevant regulations, the internal regulations regarding the personnel of teachers are periodically revised.	Personnel Department	In alignment with the needs of academic development, and to ensure the completeness of various types of regulations, a comprehensive review of all types of rules and regulations was conducted. In 2023, we proactively amended five regulations that had practical obstacles and inconsistencies, or those that were not entirely reasonable, as follows: ● Guidelines for Handling Violations of Regulations Governing Accreditation of Teacher Qualifications Submitted for Teacher Accreditation Reviews ● Guidelines for Teacher Secondment ● Guidelines for Extending Service of Presidents, Professors, and Associate Professors ● Guidelines for Handling Part-Time Employment of Faculty ● Guidelines for the Appointment of Part-Time Faculty Members
University Affairs and Governance	With excellence as our core value, we strive to enhance administrative efficiency and promote innovative services.	✓ 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.	✓ Integrate administrative operation system functions to enhance administrative service efficiency. Increase the proportion of business informatization in each unit by 10% within 4 years.	Office of the Secretariat Computer and Network Center	A lecture titled 'Legal Issue Case Sharing and Exchange Forum' was held on July 5, 2023, in the AI Information Classroom on the 5th floor of the Administration Building at the Jiangong Campus.
International Linkages and Cooperation	By participating in international alliances, enhancing international academic research collaboration, and improving international industry-academia capabilities, we actively promote internationalization.	✓ Strengthening the connection with sister schools to increase opportunities for students to participate in international exchange activities, study abroad, and internships. Engaged in bilateral exchanges with 30 international alliances and sister schools.	✓ In accordance with the '2030 Bilingual National Policy' and the Ministry of Education's 'The Program on Bilingual Education for Student's in College,' we have formulated the '2028 University Bilingual Promotion Plan' Type 1. ✓ To enhance our university's international ranking, we aim to improve our position in the QS Asia University Rankings to 350-400 and increase our collaboration with international research journals, resulting in a 10% growth in published works.	Office of Research and Development Office of International Affairs	NKUST is a member of six important international alliance organizations and three international cooperation and exchange associations or organizations. By forming alliances with other high-quality international educational institutions, we jointly develop specific cooperation strategies, achieving mutual benefit and win-win outcomes, strengthening international partnerships, enhancing image and competitive advantages, and establishing a closely interactive international network.
Financial Governance and Performance	Enhancing the efficiency of school fund execution to achieve sustainable management 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.	✓ Implement annual financial planning reports for school funds and a mechanism for disclosing school financial information.	Office of Financial Affairs Accounting Office	The 2023 fiscal year ended with a deficit of NT\$151,797,094. After adjusting for depreciation, amortization, and depletion expenses of NT\$560,666,731 related to the acquisition of assets funded by treasury allocations, in accordance with generally accepted accounting principles, the actual surplus for the fiscal year was NT\$408,869,637.



1.5.3 Listening to Stakeholders

The school is committed to engaging with all 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 stakeholders:

Category of Stakeholders	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 Ecology and Environmental Protection* ● Information Security* ● Career Counseling and Alumni Destination ● Research, innovation, and Industry-academia Collaboration ● Sustainable Development strategy ● University Affairs and Governance ● Financial Governance and Performance ● Personnel Recruitment and Remuneration* ● Occupational Safety and Health Management ● Compliance with Laws and Regulation	Campus Feedback System Satisfaction Survey for Administrative Services University Council Administrative Meeting Internal Relevant Committees University-level Research Center Exchange Symposium Administrative and Academic Exchange Symposium Public Hearings Academic Affairs Exchange Meeting Handling of Staff Grievances Labor-Management Meeting School Website and Campus Information Public Section Official Email Addresses for Every Department	At any time Once a year Two sessions per semester Once per month Handle according to demand Ad hoc Once every semester Ad hoc Once every academic year Case Review Once every 3 months At any time 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* ● Information Security ● Student Academic Support and Counseling* ● Career Counseling and Alumni Destination ● Research, innovation, and Industry-academia Collaboration* ● Gender Equality and Human Rights* ● Compliance with Laws and Regulation ● Teaching Quality Assurance and Evaluation	Campus Feedback System Satisfaction Survey for Administrative Services Intern Student Satisfaction Survey University Council Students with Disabilities Individual Support Plan (ISP) Meeting Meeting with the Principal Internal Relevant Committees Dormitory Student Conference Handling Student Grievances School Website and Campus Information Public Section Official Email Addresses for Every Department	At any time Once a year Once every academic year Two sessions per semester Handle according to demand Once every semester Handle according to demand Once every semester Case Review At any time 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 Academic Support and Counseling* ● Career Counseling and Alumni Destination ● Research, innovation, and Industry-academia Collaboration ● Sustainable Development strategy ● University Affairs and Governance ● Financial governance and performance ● Compliance with Laws and Regulation*	Campus Feedback System Employer Satisfaction Survey Graduate Destination Survey Alumni Services System NKUST Alumni Center Website Internship and Employment Expert Website and Social Media Conducting selection for outstanding alumni and outstanding departmental alumni School Anniversary Ceremony and Series of Events School Website and Campus Information Public Section Official Email Addresses for Every Department	At any time Once every academic year Once every academic year At any time At any time At any time Once a year At least 15 events per year At any time At any time



Category of Stakeholders	The Significance of NKUST	Concerned issues	Communication Method	Frequency
 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 Academic Support 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 Individual Support Plan (ISP) Meeting	Handle according to demand
			Admissions Information Seminar	Handle according to demand
			Prospective Students' Parents Briefing Session	Handle according to demand
			School Website and Campus Information Public Section	At any time
 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* ● Information Security ● Student Academic Support and Counseling ● Sustainable Development Strategy* ● University Affairs and Governance ● Financial Governance and Performance ● Gender Equality and Human Rights ● Compliance with laws and regulations* ● Teaching Quality Assurance and Evaluation	Campus Feedback System	At any time
			High School Students Orientation and Mock Test	Approximately 30 events per year
			School Website and Campus Information Public Section	At any time
			Official Email Addresses for Every Department	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.	● Campus Ecology and Environmental Protection ● Information Security* ● Student Academic Support and Counseling* ● Career Counseling and Alumni Destination ● Research, innovation, and Industry-academia Collaboration ● Sustainable Development strategy ● University Affairs and Governance ● Financial Governance and Performance ● Gender Equality and Human Rights* ● Procurement and Supply Chain Management ● Product Design and Lifecycle Management ● Compliance with Laws and Regulation ● 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
			Internship and Employment Expert Website and Social Media	At any time
			Meetings and workshops related to various project plans	Handle according to demand
			The public website for each project plan	At any time
			Contact and negotiate with enterprises for industry-academia collaboration projects	Handle according to demand
			Industry-Academia Collaboration Seminar, Industry-Academia Exchange Meeting, Corporate Presentation	Handle according to demand
			Technology Transfer and Licensed Manufacturers	Ad hoc
			Industry-Academia Collaboration Platform	At any time
			Landlord Symposium	Once every year
			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
			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



Category of Stakeholders	The Significance of NKUST	Concerned issues	Communication Method	Frequency
 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* ● University Affairs and Governance ● Financial Governance and Performance ● Occupational Safety and Health Management ● Procurement and Supply Chain Management ● Teaching Quality Assurance and Evaluation* ● Compliance with Laws and Regulation	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
			Campus Feedback System	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 Stewardship ● 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 Regulation ● Academic and Ethical Integrity*	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

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University Affairs and Governance

2.1	Diversified Governance	24
2.2	Advocacy and Collaboration	32
2.3	Workforce Diversity	34
2.4	Gender Equality Issues	37

2.5	Grievance Mechanism	39
2.6	Campus Safety	40
2.7	Occupational Safety and Health Management	41
2.8	Information Security	45





2.1 Diversified 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 professional talent, enhance culture, serve society, and promote the development of national industries. In accordance with Article 3 of the Organizational Regulations of our school, there shall be one president and two to five vice presidents (five Vice Presidents were appointed in 2023). Each administrative unit shall establish standard operating procedures in accordance with laws and regulations, delegate authority at each level, and assume responsibility at different levels to implement academic decisions.

According to Article 35 of the Organizational Regulations, the University Council serves as the highest governing body of NKUST. It convenes twice each semester, comprising of the President (Chairman), Vice President, heads of primary administrative units, deans of each college, the Director of the Innovation and Entrepreneurship Education Center, the Director of the Institute of Continuing Education, faculty representatives, staff representatives, student representatives, and other relevant personnel. Faculty and staff representatives are elected by secret ballot; student representatives include the Student Association President, the Student Council President, and elected representatives; other personnel include one representative appointed by the Kaohsiung National University of Science and Technology Faculty Association, serving for one academic year.

Furthermore, in accordance with Articles 35 and 36, NKUST has established 11 meetings and various committees, which are operated and convened by relevant units, ensuring that the interests and needs of all parties are reflected within the committees, achieving checks and balances. In the event of a conflict of interest, the chairperson or representative will recuse themselves, safeguarding the diverse balance in 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.

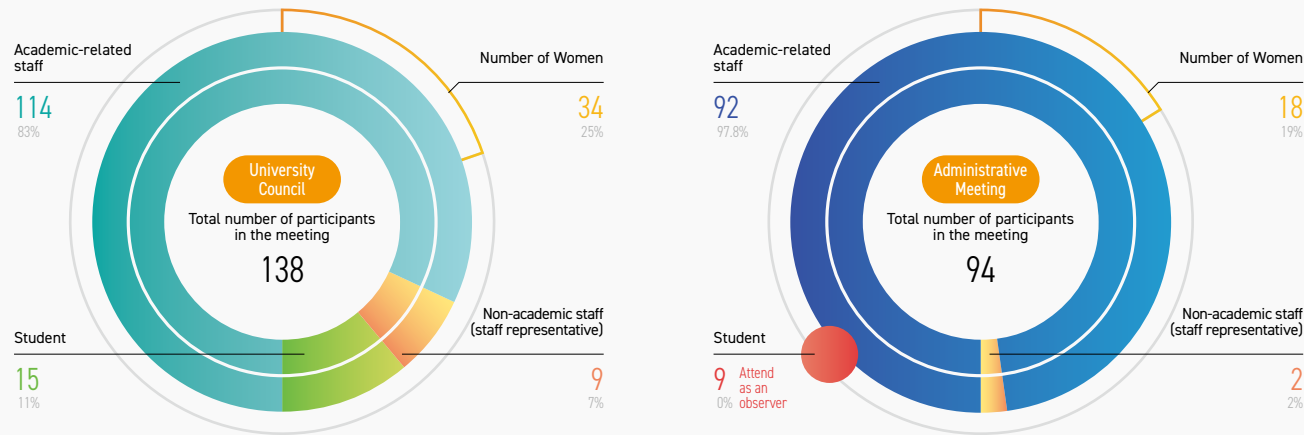
Department, Building, Center, and Office Affairs Meeting

- 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 2022/2023



▼ Agenda and Composition of Faculty and Staff-related Meetings

Meeting Name	Deliberation Items	Composition of Members				
		Number/Ratio	Total number of participants in the meeting	Academic-related staff	Non-academic staff (staff representative)	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%	33.3%
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	9	2	4
		Ratio	100%	81.8%	18.2%	36.4%
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%	44.4%	55.6%	50%

▼ Executive Roundtable Meeting

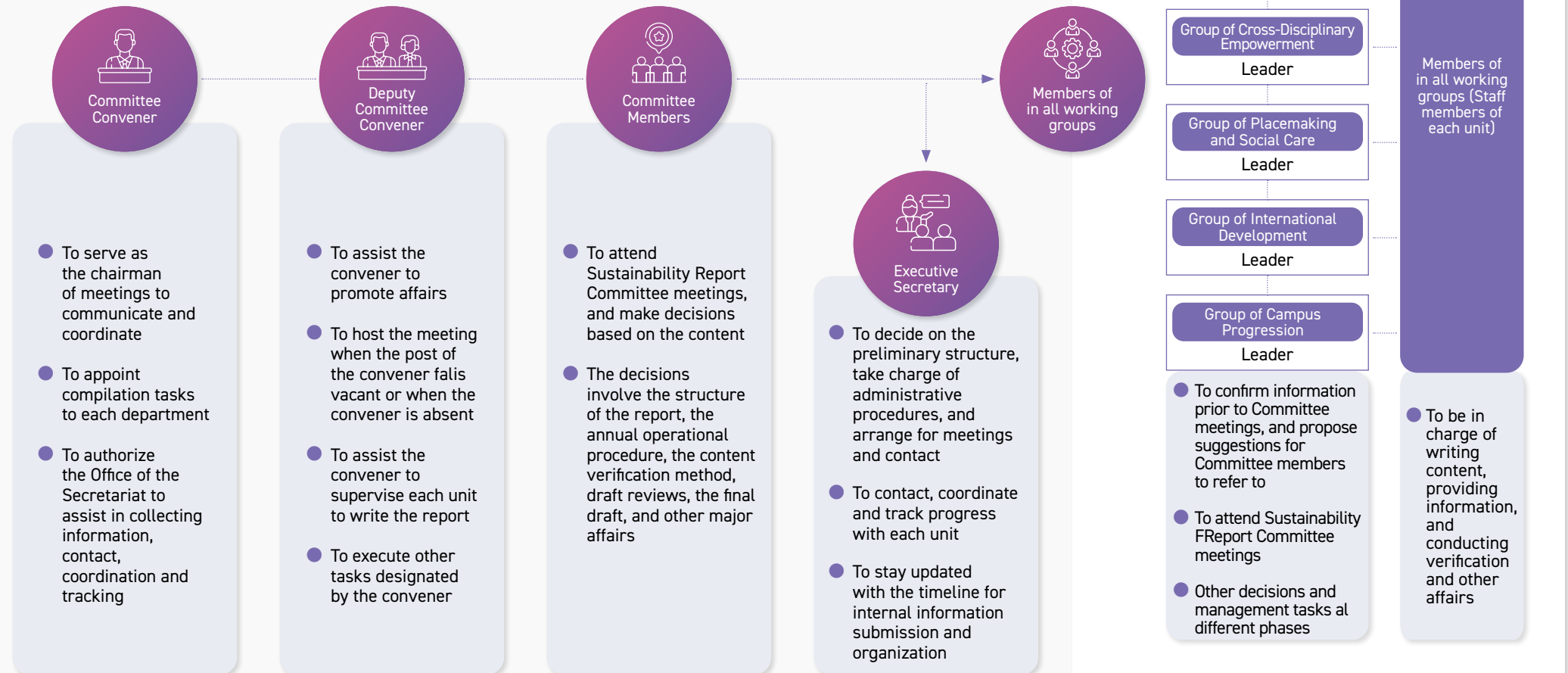
To foster campus integration and communication, discuss academic issues and campus development strategies, NKUST has held an annual High-Level Executive Roundtable Meeting since 2010. The Roundtable Meeting for the 2022/2023 Academic Year titled 'Building a Good University in the Eyes of Faculty and Students' was held on February 15, 2023, in the International Conference Hall on the 6th floor of the Library and Information Center at the First Campus of NKUST. The meeting aimed to gather diverse perspectives from faculty members, fostering self-reflection, consensus building, develop shared values, and manage team culture on campus. The conference proceedings have been compiled into a handbook and uploaded to the website of the University Secretariat for public access.

• The results handbook of Roundtable Meeting



▼ Organizational Structure and Tasks of the Sustainable Development 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 Background and Collective Knowledge of the Sustainable Development Report Compilation Committee

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	Six 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 System)
Committee Member Yao	Calculus, Fiscal Issues, Public Issues Economics	8 Hours (Sustainability Related)		

2.1.2 Internal Control Mechanisms and Risk Management



• Implementation Status of Internal Control and Internal Audit

To effectively ensure the continuous and proper operation of internal controls as part of our self-supervision mechanism, 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' based on the Executive Yuan's issuance of the 'Government Internal Control System Supervision Guidelines.' 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. No incidents of violation of relevant regulations were found in 2023.

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 2023 indicate a total of 305 risks, of which 32 have a residual risk value of 3 or higher, 161 have a residual risk value of 2, and 112 have a residual risk value of 1.
- Internal Control: Items with a residual risk value of 3 or higher and those deemed highly significant are included in the internal control system. In 2023, 56 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. Updates are reviewed regularly every year during the winter and summer breaks. As of the end of December 2023, the system contained 797 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 2023, one internal control deficiency and 81 audit deficiencies were tracked. The tracking results will be submitted for review at the Internal Audit Group meeting.

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 2023 was formed by selecting 7 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 2023, a total of five audit meetings were held, with 11 units undergoing audits on 15 items. Based on the findings or deficiencies identified during the audits, 49 improvement measures or reform recommendations were proposed. Of the 71 historical audit improvement measures or reform recommendations, 55 have been completed and removed from monitoring. 16 remain outstanding. Adding 49 items scheduled for improvement in 2023, a total of 65 items will be included for continued monitoring and tracking in 2024.



2.1.3 Financial Information

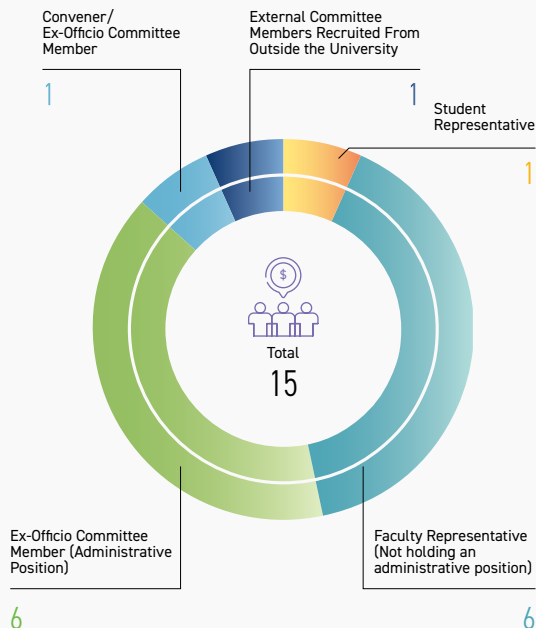
Committee for the Management of Endowment Funds

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: Number of Individuals



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

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



The following table presents NKUST's 2023 school funds amount, with operating revenues of NT\$5,951,862,000, non-operating revenues (including investment income) of NT\$274,367,000, operating costs and expenses of NT\$6,261,438,000, and non-operating expenses of NT\$116,588,000. 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\$2,625,665 thousand. A detailed breakdown of the surplus or deficit is included in NKUST's performance report of the school fund.

Overall Performance of the 2023 School Fund

Unit: NT\$ Thousand

Revenue and Expenditure	Item	Amount
Revenue	Business Revenue	5,951,862
	Other Business Revenue (Including investment revenue)	274,367
Expenditure	Operating Costs	6,261,438
	Other Operating Costs	116,588

Sources, Amounts and Ratios of 2023 Business Revenue and Expenditure¹⁰

Unit: NT\$ Thousand

Source of Income	Amount	Ratio (%)
Tuition and Miscellaneous Fees Revenue ¹¹	1,279,145	21.5%
Revenue From Industry-Academia Collaboration	1,933,020	32.5%
Income from Continuing Education	90,962	1.5%
Revenue From School Teaching and Research Grant	2,110,758	35.5%
Other Subsidy Income	514,907	8.6%
Miscellaneous Business Revenue	23,070	0.4%
Total	5,951,862	100%
Source of Expenditure	Amount	Ratio (%)
Costs of Teaching, Research, and Counseling	3,748,462	59.9%
Cost of Industry-Academic Collaboration	1,748,065	27.9%
Cost of Continuing Education	90,850	1.5%
Student Scholarships and Incentives	177,518	2.8%
Management and General Expenses	477,218	7.6%
Miscellaneous Business Expenses	19,325	0.3%
Total	6,261,438	100%

¹⁰ The financial statements of our university are prepared using the accrual basis of accounting.

¹¹ Before collecting tuition and fees from students, our school has disclosed its financial performance and related data on the school's information public website (<https://public.nkust.edu.tw/>).



2.1.4 Investment Management and Sustainable Investing



To ensure the sustainable operation and enhance the investment efficiency of the school fund, NKUST adheres to the regulations stipulated in the 'National University Endowment Fund Establishment Act' and the 'Regulations Regarding the Management and Supervision of School Funds at National Universities/Colleges.' Accordingly, we handle matters related to the investment of the school fund and formulate an annual investment plan, which is submitted to the School Fund Management Committee for review and approval. Following approval by the Investment Management Group and the School Fund Management Committee, this plan was incorporated into the financial planning reports for school funds, submitted to the University Council for review, and then forwarded to the Ministry of Education for record.

Asset allocation is determined based on relevant regulations and the required cash safety stock. The Investment Management Group has resolved that the maximum investment limit for the school fund is 15% of available funds, and this limit will be adjusted on a rolling basis in accordance with international financial market and the size of the fund. The allocation of the 2023 school fund investments is divided into two parts: 50-60% allocated to investment-grade overseas bonds, government bonds, and treasury bills, and 40-50% allocated to demand deposits, stocks, funds, preferred stocks, convertible bonds, or ETFs, with the asset allocation ratio subject to adjustments based on economic conditions.

The school fund investment prioritizes long-term investment and stable returns, while diversifying risk and adhering to Socially Responsible Investment (SRI) guidelines. Social responsibility and ESG principles are integrated into investment decisions. The top five industries by investment target proportion in 2023 were communication services (17.66%), Taiwan Stock ETFs (17.54%), healthcare industry (15.86%), consumer goods (11.93%), and funds (9.33%).

▼ The major industry distribution of the 2023 school fund investments

Major Investment Targets and Scale of School Fund	Investment Amount(USD)	Investment Amount (TWD)	Percentage (%)	ESG Proportion (%)
Communication Services	3,175,969.69	97,359,352	17.66%	100.00%
Taiwan Stock ETF	-	96,727,776	17.54%	0.00%
Healthcare Industry	2,853,374.47	87,469,368	15.86%	100.00%
Consumer Spending	2,145,570.88	65,772,475	11.93%	100.00%
Fund	1,668,635.35	51,441,233	9.33%	0.00%
National Entity	1,238,255.00	37,958,708	6.88%	0.00%
Finance	1,146,572.33	35,148,175	6.37%	100.00%
Media Entertainment	673,238.76	20,638,134	3.74%	100.00%
Information Technology	643,494.75	19,726,332	3.58%	100.00%
Semiconductor	551,132.87	16,894,978	3.06%	100.00%
Specialty Chemical Technology	323,291.26	9,910,494	1.80%	100.00%
Cosmetics	201,750.00	6,184,646	1.12%	100.00%
Automotive Industry	199,427.20	6,113,441	1.11%	100.00%

¹² The responsibilities of this school's School Fund Management Committee are equivalent to those of an Investment Responsibility Committee.

¹³ The ranking of investment industry categories is based on the total amount of investment in New Taiwan dollars, arranged from highest to lowest.

¹⁴ 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.

¹⁵ 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.



The investment amount of our school, excluding fixed deposits, is determined in accordance with Article 14 of the Regulations Regarding the Management and Supervision of School Funds at National Universities/Colleges. Considering factors such as the school's cash safety stock, the 8th and 11th Investment Management Group meetings in 2023 have decided that the upper limit of the school's funds for investment is 30% of the available funds, with a total amount of NT\$1.5 billion. As of the end of 2023, the actual investment amount stands at NT\$551,345,112. The investment targets and amounts of NKUST from 2021 to 2023 are summarized in the table below.

Target and Scale of School Funds Investment in the Past 3 Years Unit: NT\$ Thousand

Year		2023	2022	2021
Investment Targets and Amounts ¹⁶	Overseas Bonds ¹⁷	403,176	334,929	317,563
	Mutual Fund ¹⁸	51,441	30,131	27,508
	Taiwan Stock ETF ¹⁹	96,728	41,987	2,655
Scale of School Fund Investments		551,345	407,047	347,726

¹⁶ The New Taiwan Dollar for overseas bonds and mutual funds is based on the actual New Taiwan Dollar exchanged at the time of purchase for each specific item, reported to NKUST's Accounting Office.

¹⁷ The total number of investment targets for overseas bonds in each year from 2021 to 2023 was as follows: 38 in 2023, 28 in 2022, and 25 in 2021. Beginning in 2023, in accordance with the Ministry of Education's requirement for bond amortization, this New Taiwan Dollar amount represents the total year-end book value of the New Taiwan Dollar bonds after amortization.

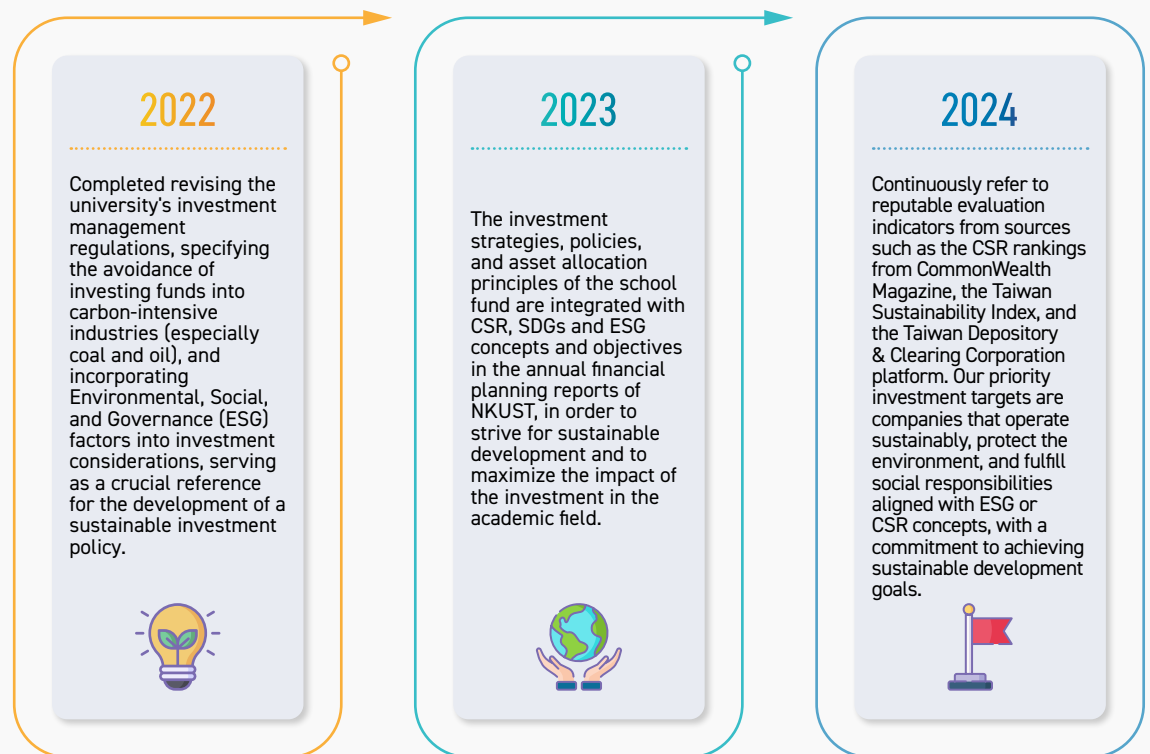
¹⁸ The total number of investment targets for mutual funds in 2021-2023 was four for each year. All four targets were single-investment, and two of the targets also had regular fixed-amount investments.

¹⁹ The total number of investment targets for Taiwan Stock ETFs in 2021-2023 is as follows: In 2023, there are 4 targets, of which 1 target is the same as that of 3 alumni donation projects; in 2022, there are 4 targets, of which 1 target is the same as that of 2 alumni donation projects; and in 2021, there are 4 targets, of which 1 target is the same as that of 1 alumni donation project.

Sustainable Investment Policy and Progress Planning

In recent years, climate change has become increasingly severe. Many countries around the world have pledged to achieve net-zero emissions by 2050 and view ESG (Environmental, Social, and Governance) as a key trend in economic structure. In today's investment market, the focus is no longer solely on corporate profits. Investors must also consider environmental sustainability and social development, particularly in the context of long-term investments. NKUST, fulfilling its social responsibility as a university, has incorporated the following provision into its Investment Income and Expenditure Management Guidelines, Point 10: 'Investments should avoid carbon-intensive industries (such as coal and oil), and ESG factors should be integrated into investment considerations. Therefore, prioritizing investments in companies with ESG or CSR concepts, focusing on sustainable operations, environmental protection, and social responsibility, and incorporating these principles into the asset allocation of the school fund.'

NKUST will continue to review the proportion of sustainable investment targets by industry and company, particularly in the bond portion, which accounts for a significant portion of its long-term investments. The University will assess whether the target companies and national bonds adhere to ESG-related activities and initiatives, in accordance with the investment income management guidelines and to implement its sustainable investment policy. The summary of sustainable investment outlook for NKUST from 2022 to 2024 is as follows in the table below:





2.2 Advocacy and Collaboration

2.2.1 Membership in Public Associations

Our university actively participates in domestic university associations. By becoming a member of these associations and engaging in their activities and seminars, we enhance the visibility of our university and explore opportunities for interdisciplinary collaboration and industry-academia cooperation. Including: Chinese Ocean & Underwater Technology Association, Oceanographic Society of the Republic of China, Taiwan Ocean Industry Association, Institute of Engineering Education, Taiwan, R.O.C., Chinese Institute of Engineers, Taiwan Higher Education Society, Association of National Universities of Taiwan, Association of National Universities of Science and Technology of Taiwan, Association of National Universities of Science and Technology of Taiwan, Association of Technological and Vocational Education in Republic of China, Sanmin District Education Association of Kaohsiung City, Academia-Industry Consortium for Agricultural Biotechnology Park, Taiwan Railways Tourism Association, Academia-Industry Consortium for Southern Taiwan Science Park, Taiwan Industry-Academia-Industry Consortium, Southern Region Vocational College Intercollegiate Integration Alliance, Chinese Association of Industrial Vocational Education, and Taiwan Ciaotou Science Park Academia Industry Consortium.

Furthermore, NKUST established the Kaohsiung National University of Science and Technology Faculty Association on June 27, 2018. In accordance with the spirit of academic freedom enshrined in the University Act, the Association's founding principles are to uphold the professional dignity of teachers, promote their professional growth, improve the educational environment on campus, enhance the quality of student learning, safeguard the legal rights of teachers, and foster the flourishing development of the university. The participation rate of teachers at NKUST was approximately 22.6%.

2.2.2 International Cooperation Alliance

Regarding international advocacy organizations, the Center for University Social Responsibility under the Ministry of Education and the Office of Humanities Innovation and Social Practice Programs within the Ministry of Science and Technology have jointly implemented the University Social Responsibility (USR) program since 2017. This program aims to provide guidance to universities in aiding local sustainable development and fostering collaboration towards achieving Sustainable Development Goals (SDGs). Through the Taiwan-Japan Alliance cooperation relationship, we aim to promote substantial collaboration in academic research and higher education between the two parties. Additionally, our goal is to assist domestic universities in their international connections for social responsibility projects and enhance the exposure of universities in the field of social practice.

Currently, NKUST participates in two major international alliances (HAWtech-TAltech Alliance and Taiwan-Japan Alliance of Local Revitalization and Social Practice), as well as three international cooperation and exchange associations or organizations (FICHET Foundation for International Cooperation in Higher Education of Taiwan, Presidents' Forum of Southeast and South Asia and Taiwan Universities, and Edu-Connect Southeast Asia Association, Kaohsiung). By forming alliances with other high-quality international educational institutions, we aim to develop specific cooperation strategies to benefit both alliance schools, strengthen international partnerships, enhance each other's image and competitive advantages, and establish a closely interactive international network.

Planning and Promotion of Foreign University Cooperation Alliance

In 2022, in addition to actively participating in the activities organized by the Taiwan-Germany University of Science and Technology Alliance²⁰ (hereinafter referred to as the TAltech-HAWtech Alliance) and the Taiwan-Japan Alliance of Local Revitalization and Social Practice (hereinafter referred to as the Taiwan-Japan Alliance), we also established links with high-quality science and technology schools and college alliances in France through bilateral exchange meetings of the Foundation for International Cooperation in Higher Education of Taiwan and French Office in Taipei, establishing inter-school interaction in the field of scientific research, promoting student exchange for science and technology studies, and increasing internship opportunities.

TAltech-HAWtech Alliance (HAWtech-TAltech)

- HAWtech-TAltech, since signing a bilateral exchange agreement in 2017, has promoted cooperation in areas such as student exchange, corporate internships, school field internships, Summer School, and Visiting Tours. NKUST serves as the rotating chairman of TAltech from 2021 to 2022, coordinating relevant activities and bilateral exchange. In 2022, an online consensus meeting was held, where both Taiwan and Germany presented alliance work reports and shared their achievements in implementing the SDGs. The chairmanship was then passed on to National Yunlin University of Science and Technology.
- In April 2023, two research teams were formed, focusing on 'Net Zero Carbon Emissions' and 'Smart Automated Electric Vehicles.' Conceptual proposals were submitted in early May. In June, a visit to HAWtech laboratories in Germany, including Karlsruhe, Aachen, and Dresden, is planned to facilitate direct exchange between faculty members and the implementation of future collaborative research projects.
- In December 2023, both parties held an online meeting to discuss the 2024 visit plans for both countries and partner schools. As the contract expired in March 2024, it is anticipated that the contract renewal ceremony will take place during the HAW Roundtable Meeting in Germany, attended by partner schools of the National Taiwan University of Science and Technology.

Taiwan-Japan Alliance

- In 2019, the Center for University Social Responsibility of the Ministry of Education and the Office of the Humanity Innovation and Social Practice Project of the Ministry of Science and Technology established the 'Taiwan-Japan University Alliance Provisional Office,' comprising six universities from Taiwan and four from Japan. The Taiwan-Japan Alliance was officially established in November 2021. Its purpose is to promote the exchange of social practice experiences between universities, build a multi-university network, addresses local issues, and assist in local revitalization.
- NKUST actively participates in alliance activities, including electronic newsletter editing, practice-based workshops, seminars, community/corporate cooperative internships, and other related activities. We also promote international cooperation and international seminars. The annual Taiwan-Japan Leaders' Meeting, the New Praxis and Taiwan-Japan Alliance Conference are held each year to discuss alliance operations, collaborative publishing projects, and share cooperative achievements. In 2023, five training workshops, two international collaborative courses, and the 'Towards International Common Goods - Regional Caring Practice Competition' were held, with a total of 12 teams and 80 Taiwanese and Japanese students participating.
- Beginning in 2022, NKUST has invited Japanese professors to deliver lectures in English for the 'Local Creation Studies' course. Furthermore, the '1-Turn Local Creation Studies Credit Program' has been upgraded to English instruction. In 2023, we continued to collaborate on offering international collaborative courses, train foreign student teaching assistants (TAs), assist with teaching, and participate in overseas internships. We also promoted international cooperation courses on local revitalization.



2023 1-Turn Local Creation Studies Credit Program International Collaborative Courses



2023 Taiwan-Japan Alliance USR 'Aquaculture Management - Industry Sustainability Workshop'

²⁰ Taiwan-Germany University of Science and Technology Alliance: The alliance is jointly formed by HAWTech and TAlTech, with the former consists of six German universities of science and technology, namely Darmstadt University of Applied Sciences, Karlsruhe University of Applied Sciences, Esslingen University of Applied Sciences, Dresden University of Applied Sciences, Aachen University of Applied Sciences, and Berlin University of Applied Sciences, while the latter consists of six Taiwan universities of science and technology, namely National Taiwan University of Science and Technology, National Taipei University of Technology, National Chin-Yi University of Technology, National Yunlin University of Science and Technology, National Formosa University, and NKUST.



2.2.3 Sustainability-related Alliances and Projects

NKUST is committed to sustainable development, achieving the Sustainable Development Goals through the establishment of deep partnerships with various sectors. Currently, we maintain close relationships with several long-term partners, including the Gloria South, Industry-Academia-Enterprise Members, the Taiwan Passive Component Industry Association & Taiwan Alliance for Sustainable Supply.

- **Gloria South**

Gloria South is an alliance made up of 12 universities and colleges in central and southern Taiwan, focusing on sustainable technology research and development, including green energy and carbon reduction, circular economy, and smart manufacturing. Through cross-school industry-academia collaboration and technology transfer, the initiative aims to promote the sustainable development of regional industries and establish connections with industrial clusters such as Shalun and Southern Taiwan Science Park.

- **Industry-Academia-Enterprise Members**

Since 2021, we have established partnerships with 18 companies, including ASE Semiconductor, Jyu Sin Steel, Hallmark Technology, Geminisat, and Qihua Creative, to jointly promote green technology research and development in order to address the challenges of sustainable development.

- **Taiwan Passive Component Industry Association & Taiwan Alliance for Sustainable Supply**

Collaborating with these associations promotes the development of a green supply chain and implements social and environmental responsibility. In 2022, we participated in the TASS 2023 Sustainable Taiwan Expo, presenting its sustainable energy, circular economy, and green manufacturing technologies.

- **Assist Manufacturers in Their Transformation Towards Low-Carbon and Smart Counseling**

We are committed to assisting the manufacturing industry in its low-carbon and smart transformation, promoting carbon footprint assessments and technical diagnostics. In 2023, we assisted 64 manufacturing companies in their low-carbon and smart transformation, enhancing their net-zero carbon emissions and sustainable operation capabilities.

- **Other Long-term Partnership Relationship**

Currently, we have established long-term partnerships with several foundations, including the Industrial Technology Research Institute, Institute for Information Industry, and the Metal Industries Research & Development Centre. These partnerships contribute to the sharing and integration of resources between academia and industries, fostering greater innovation and development.



Furthermore, Taiwan's ESG promotion efforts have focused heavily on environmental protection (E), while relatively neglecting the comprehensive aspects of social responsibility (S) and corporate governance (G). The College of Management at NKUST is dedicated to cultivating comprehensive ESG talent and bridging the gap between corporate CSR and ESG sustainability reporting.

In December 2023, the College of Management, in collaboration with the Stichting IPOE Education Foundation (IPOE), launched the 'ESG Interdisciplinary Competency Development Program.' The program selected 27 students for training in 'ESGL Sustainable Management Literacy' and 'ESGP Sustainable Management Planner' international certifications. All trainees passed the examination and received the internationally recognized IPOE certification. The College of Management plans to continue cultivating professionals with SDGs competencies.



The inaugural 'ESG Course and International Certification Training' program enrolled 27 participants. Upon completion, all participants successfully passed the 'ESGL Sustainable Management Literacy' and 'ESGP Sustainable Management Planner' certification examinations.



The College of Management at NKUST has partnered with the Stichting IPOE Education Foundation (IPOE) to implement a 'ESG Interdisciplinary Competency Development Program'





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. In 2023, the total number of faculty and staff at NKUST was 3,370.²¹ Of this number, the percentage of indigenous faculty and staff at our university was 0.7%, while the percentage of individuals with disabilities was 3.0%.

Gender Statistics of Faculty and Staff at our School

Type	Number of males (people)	Ratio of males	Number of females (people)	Ratio of females	Total (people)
Full-time faculty	649	75.5%	211	24.5%	860
Part-time Faculty (0.2 FTE)	114	65.5%	60	34.5%	174
Subtotal	763	73.8%	271	26.2%	1,034
Type	Number of males (people)	Ratio of males	Number of females (people)	Ratio of females	Total (people)
Regular staff	98	38.7%	155	61.3%	253
University-endowed staff	111	25%	333	75%	444
Project-based employees	261	42%	358	58%	619
Project researchers	14	88%	2	12%	16
Research assistant (0.2 FTE)	531	53%	473	47%	1,004
Subtotal	1,015	43.5%	1,321	-	2,336
Total	1,778	52.8%	1,592	42.2%	3,370

Age Statistics of Faculty and Staff at NKUST

Type	Number of people under 30	Percentage	Number of people aged 31-50	Percentage	Number of people over 51	Percentage	Total
Full-time faculty	0	0%	289	33.6%	571	66.4%	860
Part-time Faculty (0.2 FTE)	4	2.3%	68	39.1%	102	58.6%	174
Subtotal	4	0.4%	357	34.5%	673	65.1%	1,034
Type	Number of people under 30	Percentage	Number of people aged 31-50	Percentage	Number of people over 51	Percentage	Total
Regular staff	7	2.8%	98	38.7%	148	58.5%	253
University-endowed staff	62	14%	309	69.6%	73	16.4%	444
Project-based employees	227	37%	341	55%	51	8%	619
Project researchers	1	1%	12	75%	3	19%	16
Research assistant (0.2 FTE)	939	93.5%	53	5.3%	12	1.2%	1,004
小計	1,236	52.9%	813	34.8%	287	12.3%	2,336
總計	1,240	36.8%	1,170	34.7%	960	28.5%	3,370

Regional Statistics of Faculty and Staff at Our School

Type	Citizen	Percentage	Foreigners	Percentage	Total
Full-time faculty	844	98.1%	16	1.9%	860
Part-time Faculty (0.2 FTE)	171	98.3%	3	1.7%	174
Subtotal	1,015	98.2%	19	1.8%	1,034
Type	Citizen	Percentage	Foreigners	Percentage	Total
Regular staff	253	100%	0	0%	253
University-endowed staff	444	100%	0	0%	444
Project-based employees	612	99%	7	1%	619
Project researchers	14	88%	2	12%	16
Research assistant (0.2 FTE)	967	96%	37	4%	1,004
Subtotal	2,290	98.8%	46	2%	2,336
Total	3,305	98.1%	65	1.9%	3,370

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

Type	Total Number of Personnel in 2023	Total Number of Personnel in 2022	Total Number of Personnel in 2021
Full-time faculty	860	838	786
Part-time Faculty (0.2 FTE)	174	165	172
Subtotal	1,034	1,003	958
Type	Total Number of Personnel in 2023	Total Number of Personnel in 2022	Total Number of Personnel in 2021
Regular Staff (including technicians, maintenance workers, and security guards)	253	272	292
University-endowed staff	444	462	460
Project-based employees	619	621	579
Project researchers	16	35	30
Research assistant (0.2 FTE)	1,004	1,029	998
Subtotal	2,336	2,419	2,359
Total	3,370	3,422	3,317

²¹ Method of Calculating Headcount: The number of personnel is calculated based on statistics from various personnel entry points. To ensure consistency in annual data, the statistical reference date is set as the reporting date for technical and vocational data (the reference date being October 15th of each year). However, project staff and part-time assistants are calculated based on the statistical reference date of December 31, 2023. In addition, adjunct professors and adjunct assistants are calculated at 0.2 FTE.



The new hire and turnover rate of faculty and staff at our school in 2023 (excluding part-time assistants)

Unit: Number of Individuals

Categories of Faculty and Staff		Total Number of People at NKUST	New Employees (Rate)	The Number of Resignations (Rate)
Teachers	Male	649	24 (3.7%)	12 (1.8%)
	Female	211	7 (3.3%)	3 (1.4%)
	Under 30	0	0 (0%)	0 (0%)
	31-50 years old	289	27 (9.3%)	0 (0%)
	Over 51	571	4 (0.7%)	15 (2.6%)
	Total	860	31 (3.6%)	15 (1.7%)
Staff	Male	483	90 (18.6%)	91 (18.8%)
	Female	850	106 (12.5%)	155 (18.2%)
	Under 30	298	89 (29.9%)	17 (5.7%)
	31-50 years old	760	93 (12.2%)	221 (29.1%)
	Over 51	275	6 (2.2%)	8 (2.9%)
	Total	1,333	196 (14.7%)	246 (18.5%)

Weekly Working Hours Statistics of Faculty and Staff at Our School

Unit: Hours

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	14
Part-time teaching assistants	8.5

▼ 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.

Contracted Deployment of Employees

- As of December 31, 2023, NKUST utilized 124 contracted dispatched employees.
- 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:



Maintenance of departmental (or divisional) computers, servers, and peripheral equipment.



Campus planting maintenance.



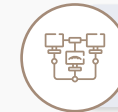
Operation and maintenance of campus sewage treatment plants.



Campus security and guard duty.



Campus waste collection and resource recycling classification.



Maintenance of campus computer network.



Campus cleaning and maintenance.



Campus air conditioning equipment maintenance and servicing.

The total number of contracted dispatched employees used by NKUST in 2023

Unit: Number of Individuals

Business Type	People
Cleaning	81
Computer Information Equipment Maintenance	6
Security	24
Plants Maintenance	1
Engineering Technology, Construction, and Electro-Mechanical Maintenance	2
Other (Garbage Collection and Air Conditioning Maintenance)	10
Total	124



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.

Average Monthly Employee Salary and Statutory Minimum Wage in the Past 3 Years

Personnel Type	2023	2022	2021
Full-time faculty	NT\$110,043	NT\$110,227	NT\$105,473
Project researchers	NT\$66,681	NT\$63,593	NT\$61,965
Regular Staff (Civil Servants)	NT\$68,290	NT\$67,564	NT\$64,809
Contracted Employees	NT\$36,275	NT\$35,278	NT\$32,852
Statutory Minimum Wage	NT\$ 26,400	NT\$ 25,250	NT\$ 24,000

▼ Remuneration Policies and Procedures

① Civil Servants and Teaching Personnel:

- Provided under the provisions of the 'Guidelines Governing the Payment of Remuneration to Military, Civil Servants and Teachers.'
- 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.

② The staff employed by the school fund:

- 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.
- 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.
- 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.
- Technical personnel are eligible for professional allowances, and the salary scales and promotion regulations for all job titles and technical personnel are clearly defined.

③ The university does not provide severance pay for senior executives.

▼ 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

- ① An annual special budget (sports activity fee) is allocated: NT\$2,000 for each current full-time faculty member (including project teachers) and staff members funded by the school.
- ② 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.
- ③ Insurance: Provides group insurance with preferential rates for public sector employees.
- ④ 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).



• Special section for contracted store discounts

Parental Leave Status at Our School in the Past 3 Years

Item	Year	Number of males		Number of Women		Total
		Subject to the Labor Standards Act	Civil Servant	Subject to the Labor Standards Act	Civil Servant	
Total number of employees on parental leave	2021	389	744	741	354	2228
	2022	367	710	682	348	2107
	2023	422	714	718	340	2194
Actual numbers of employees who used parental leave	2021	0	0	18	11	29
	2022	1	0	16	5	22
	2023	2	0	21	5	28
The total number of employees who were reinstated after completing parental leave	2021	0	0	17	8	25
	2022	1	0	15	2	18
	2023	1	0	15	2	18



2.4 Gender Equality Issues

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:



Integrate relevant resources from various departments of the school, formulate a plan for implementing gender equality education, and implement and review its execution results.



Plan or organize activities related to gender equality education.



Develop and promote curriculum, teaching, and evaluation for gender equality education.



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.



Investigate and handle cases related to the Gender Equity Education Act.



Plan and establish a safe campus environment for gender equality.

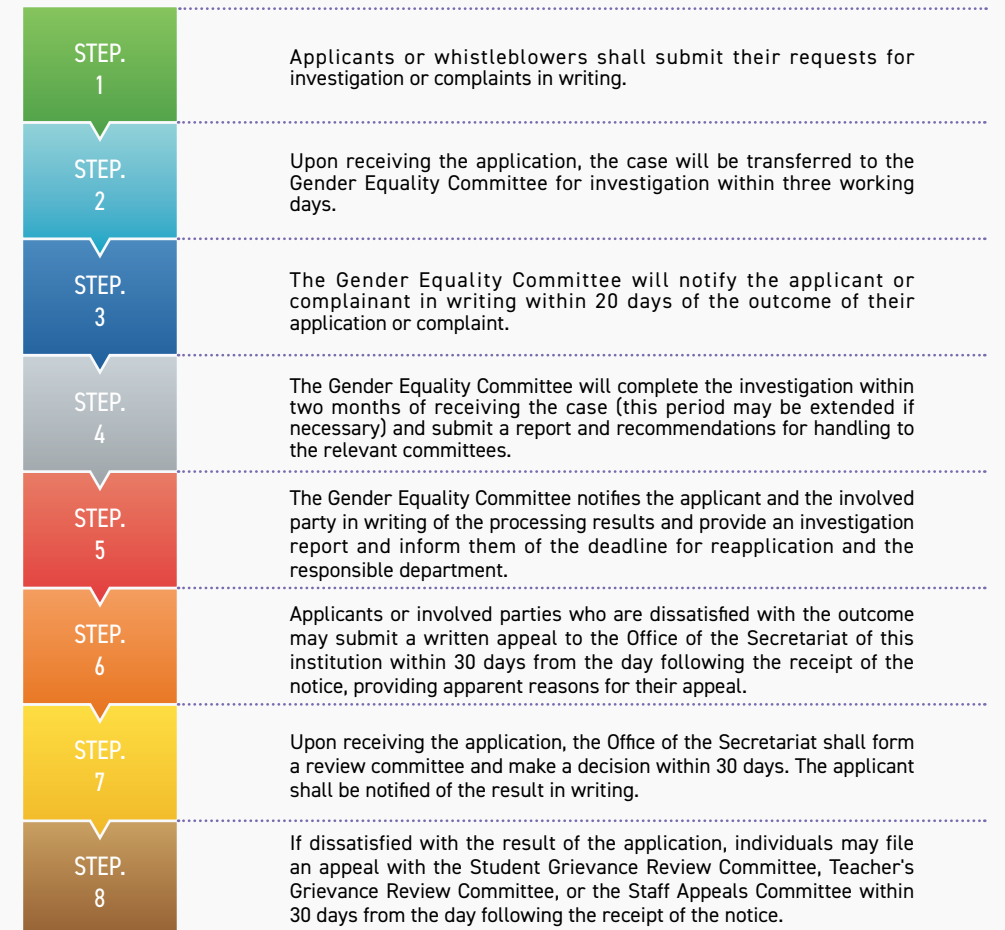


Other matters regarding gender equality education.

Handling of Gender Equality Incidents and Grievance Mechanism

① Chapter Four of NKUST's Campus Sexual Assault, Sexual Harassment, or Bullying Prevention Regulations (hereinafter referred to as the '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:





② NKUST provides clear communication channels and establishes a formalized, fair, and just grievance mechanism. The following outlines the grievance mechanisms for students, faculty and staff, and previous gender equality-related grievance mechanism is 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 members of the public known for their fairness. The Committee is responsible for handling complaints filed by students and relevant student self-governing organizations.

Grievance Channel for Faculty and Staff :

- 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.'
- 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 Issue Activities, Mainstreaming Lectures, and Routine Advocacy

① Gender-Related Courses and Activities: Increase the number of gender-related general education courses, and expand micro-credit courses and gender-related special topic lectures. We organize annual women's film festivals and exhibitions featuring films addressing gender-related issues. Speakers are invited to discuss gender equality issues and visual aesthetics from diverse perspectives of women across various countries.

② Gender Mainstreaming Seminars: Conduct gender mainstreaming seminars at all campuses, targeting all faculty and staff. Based on gender statistics, evaluate and compile budgets for campus policies, plans, curricula, and equipment to promote harmonious gender relations and enhance gender equality awareness. Enhance the understanding of faculty, staff, and students regarding diverse gender relationships, gender equality, love, and marriage, and eliminate stereotypes.

▼ The 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 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 offshore internships.
7	An Administrative and Academic Leadership Consensus Camp is held each academic year, during which sustainability is promoted.

Job Dispute Resolution

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

Target	2021	2022	2023
Teacher (out of 5)	3.93	4.40	4.25
Staff (out of 5)	4.00	4.12	4.20
Student (out of 5)	3.91	4.04	4.17
Average (out of 5)	3.92	4.08	4.19



2.5 Grievance Mechanism



2.5.1 Staff Grievance

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.'

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, a 'Student Grievance Review Committee' is formed, consisting of students, teachers, and members of the public known for their fairness. The committee is responsible for handling complaints filed by students, student associations, and other relevant student self-governing organizations.

- **Appeal Categories and Channels:** In accordance with Article 3 of the Regulations, any individual who believes that NKUST's disciplinary actions, other measures, or resolutions are illegal or inappropriate, resulting in harm to their rights, may file an appeal with the Grievance Review Committee. Appealable matters include expulsion, grade assessment, and credit transfer.
- **Mechanism:** According to Article 4 of the Regulations, the Grievance Review Committee shall complete its review within thirty days of receiving the appeal. The deadline may be extended once depending on the circumstances, but shall not exceed two months in total. Cases involving major disciplinary actions such as withdrawal from school or expulsion shall not be subject to extensions of the review period.
- **Remedies:** In accordance with Article 4 of the Regulations, if the decision made by the Complaint Evaluation Committee involves an administrative action, the decision document shall specify, 'Those who disagree with this decision may file an appeal within thirty days from the date of receipt of this decision.' If the decision involves a non-administrative action, the decision document shall specify, 'Those who disagree with this decision may file a lawsuit within thirty days from the date of receipt of this decision, in accordance with the law, to seek redress.' Cases involving major disciplinary actions such as withdrawal from school or expulsion shall not be subject to extensions of the review period.

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.' A dedicated section on the school's homepage has been set up to provide educational materials on bullying prevention and to offer support and resources for those affected. We are committed to preventing campus bullying by fostering a supportive learning environment through educational training and lectures. Additionally, we provide relevant application forms and resources to assist victims in seeking redress and managing incidents.



• Campus Bullying Prevention Section

▼ Process for Addressing Campus Bullying Incidents

- STEP.1** Applicants and whistleblowers shall submit their requests for investigation or complaints in writing.
- STEP.2** Upon receiving a case, the school will transfer the case to the Campus Bullying Response Team for investigation and handling within 3 working days.
- STEP.3** The Campus Bullying Prevention Response Team will notify the applicants or informants of the investigation or complaint results in writing within 20 days from the date of receiving the application.
- STEP.4** The Campus Bullying Prevention Response Team shall establish a three-person investigation team to conduct the investigation, which should be completed within two months and may be extended if necessary.
- STEP.5** Following the completion of the investigation, the Campus Bullying Prevention Response Team will notify the applicant and the involved party in writing, and they should also provide an investigation report and inform them of the deadline for reapplication.
- STEP.6** If the applicant or the party involved is dissatisfied with the handling result, they may file an appeal with the Office of Student Affairs, Student Services Division, within 20 days of receiving the notification.
- STEP.7** The Office of Student Affairs, Student Services Division will promptly establish a review committee and issue a written notification of the appeal result within 30 days.
- STEP.8** If the involved parties are dissatisfied with the handling of the school bullying incident, they may file a complaint or seek other administrative remedies in accordance with the Teachers' Act and relevant student grievance regulations.

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.

- Conduct campus bullying prevention awareness campaigns during the annual freshman orientation ceremony.
- Each department holds student on-site 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.
- When the administrative unit holds school-wide student maritime internship briefing sessions, it promotes the relevant regulations for preventing campus bullying.

2.5.4 Key Significant Events

A total of 43 critical incidents that significantly impacted NKUST's reputation, entered the review process of various committees, and were finalized, occurred in 2023. This included identifying potential and actual negative impacts on stakeholders through the grievance mechanism and other procedures, as well as through other 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. All major cases closed in 2023 have been finalized according to the procedures of each committee.



The statistical summary of significant key events for NKUST in the past three years²²

Unit: Case

Summary of Key Significant Events	2023	2022	2021
Teacher Grievance Case Handling	1	2	4
Student Grievance Case Handling	17	22	15
Gender-Related Case Handling	18	1	15
Procurement Dispute Case	2	2	1
Faculty Academic Ethics Cases	5	0	6
Student Academic Integrity Cases	3	1	1
Administrative Litigation	1	1	1
Total	47	29	43

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. However, 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.

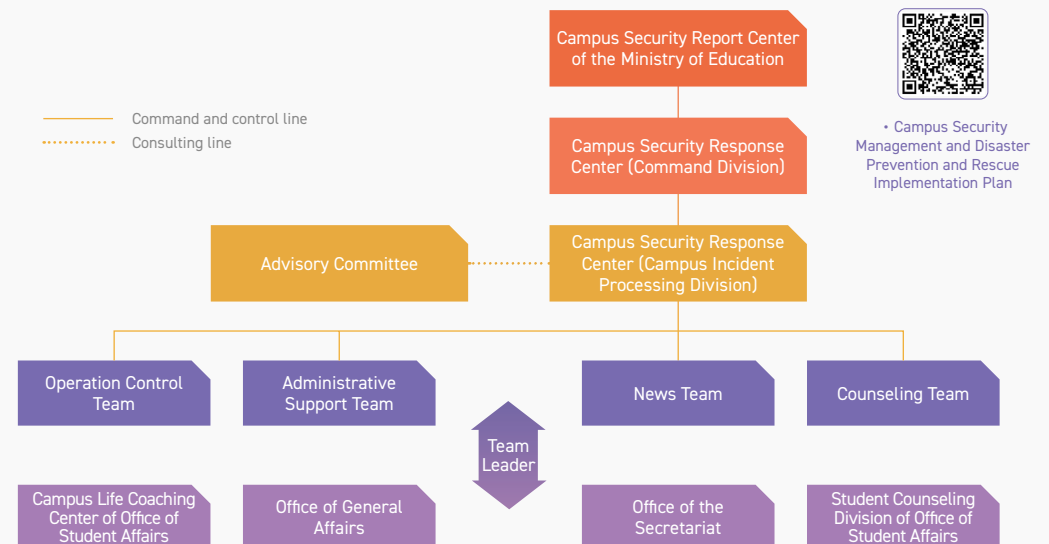
Intervention through Counseling

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

To ensure campus safety and a stable learning environment, NKUST has established the 'National Kaohsiung University of Science and Technology Campus Security Management and Disaster Prevention and Rescue Implementation Plan.' This plan prioritizes the safety of personnel, operations, facilities, and property as its core objectives. It clearly defines the responsibilities of each unit and strengthens the overall safety functions of the campus. By integrating both internal and external resources, a comprehensive disaster management system will be established. This system will provide timely support and an effective command structure to rapidly prevent, respond to, and manage campus safety incidents. This will minimize harm and ensure the safety of faculty, staff, students, and campus facilities, as well as maintain the school's reputation.

▼ The organizational structure of our Campus Safety Campus



²² Statistics on teacher and student grievance cases do not include re-appeals or appeals.

2.7 Occupational Safety and Health Management

To prevent occupational hazards and safeguard the safety and health of faculty and staff, this institution 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. Committed 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. The statistical summary of occupational incidents for NKUST 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	2023	2022	2021
Number of Temporary Total Disability Cases, Excluding Accidents Occurring During Commuting to and from Work	0	0	2
Number of work-related ill health cases	0	0	0
Total annual hours worked	6,821,424 hours	7,025,165 hours	7,223,868 hours
The frequency rate (FR) of disability injuries per million working hours	0.00	0.00	0.28
The severity rate (SR) of disability injuries per million working hours	0.00	0.00	8.17
The occupational disease rate (ODR)	0.00	0.00	0.00

All newly hired faculty and staff, regardless of employment status, 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.

2.7.2 Health Promotion

Regular Health Examinations for Workers

This report investigates the Labor Insurance data of NKUST and, in accordance with the Regulations on Labor Health Protection, identifies in-service employees who qualify for the annual general (or special) health examinations. Conduct a survey of medical institutions recognized by the Ministry of Labor for health (special) examinations, coordinate the examination schedule, confirm the examination items, and notify the in-service employees who are required to undergo the examination.

This report analyzes and evaluates health check-up results, classifies health status based on the analysis, and implements health management accordingly. When necessary, the university will arrange for an occupational medicine specialist, hired by the university, to provide on-site health services and improvement guidance. Occupational nurses will then follow up and manage the process to ensure comprehensive health management at the university.

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.



▲ Provide a variety of testing instruments for students to conduct measurements

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 35 medical institutions (2 hospitals and 33 clinics), ensuring comprehensive health benefits for all faculty, staff, and students.



• List of Contracted Medical Institutions

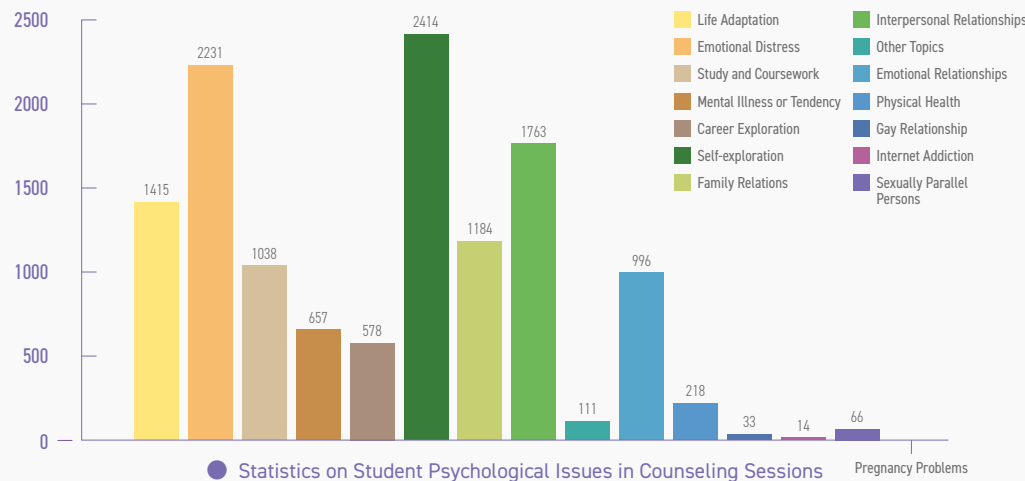
Campus Counseling and Guidance

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. According to statistics from 2023, the total number of counseling sessions reached 6,954, remaining consistent with the previous two years. This reflects that NKUST's full-time counseling staff is nearing its capacity limit. Recent amendments to the Student Guidance and Counseling Act have changed the ratio of school psychologists to students from 1:1,200 to 1:900, indicating a growing need for additional counseling personnel. Increasing staff not only enhances counseling service quality but also enables the widespread promotion of mental health education, fostering its integration into campus life.

A 2023 analysis of student psychological issues revealed that the top three concerns were



It is speculated that this is related to the depression screening conducted during freshman orientation. These screenings allow freshmen to assess their own adaptation during the enrollment process and encourage them to seek counseling. Whether students come for counseling due to screening or seek help proactively, most come due to adaptation issues arising from changes in their environment or lifestyle adjustments. Typically, around the time of mid-term exams, students experience a reduction in their concerns as they adjust to the pace of university life, their living environment, and their social circles.

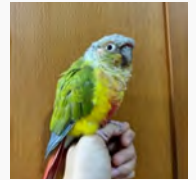


Positive Psychology Counseling

The Counseling Group is dedicated to promoting a positive guidance and care system based on a three-tiered prevention framework, providing students with greater support and resources, fostering their mental health and overall development.

1 Animal-Assisted Therapy :

- Animal-assisted therapy plays a significant role in mental health. Through animal companionship, it effectively alleviates stress, promotes emotional expression, and fosters trust. The Counseling Group has introduced a parrot named 'Cohee' as an office partner. In addition to providing professional individual and group counseling, this initiative enriches the therapeutic space with eco-healing and animal-friendly features.



- In 2023, the Counseling Group implemented animal-assisted therapy through collaboration with professional therapists and animal trainers. Following pre- and post-test analysis and therapeutic follow-up interviews, the 19 participants demonstrated a reduction in anxiety levels, with effects ranging from 7.7% to 50%.

2 Aromatherapy :

- Aromatherapy combines techniques such as olfactory therapy, massage, and emotional support, utilizing the scents of essential oils to regulate the parasympathetic nervous system and alleviate the physical and mental responses caused by stress. This therapy not only provides holistic healing for the body, mind, and spirit, but also encourages recipients to express their emotions through scent, allowing for the release of unspoken feelings.
- Following a pilot aromatherapy intervention program in the 2022-2023 second semester, students demonstrated significant improvements in their emotional well-being and stress levels. In the 2023-2024 first semester, the aromatherapy therapy experience was expanded to all five campuses, with a total of 261 students participating. The average pre-test anxiety score was 45.1, while the average post-test score was 33.9, indicating a significant decrease in student anxiety levels. This indicates that the moderate use of aromatherapy can effectively help students relax both physically and mentally, promote positive emotions, and enhance overall mental health.

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

In 2023, the Education Ministry's subsidy-supported 'Promotion of Campus Culture in Life Education and SPROUT Project' was coordinated by the Counseling Group in the Office of Student Affairs and the Center for the Liberal Arts to develop life and ethics courses aimed at enhancing students' social skills, problem-solving abilities, and emotional awareness. A total of four sessions were held throughout the year, with 41 students participating. The average satisfaction rating was 94%.

Micro-Credits in Life Education





Implementing Campus Mental Health Promotion Program

In 2023, NKUST implemented the 'Campus Mental Health Promotion Program' to enhance students' mental health, social adaptation, and personal development, encompassing four major themes:



Mental Health Themed Activities

Enhancing mental health quality, interpersonal interactions, and emotional expression. A total of 33 sessions were conducted, with 1,869 participants, with a satisfaction rate of 95%.



Mental Health Gatekeepers

Fostering empathy, self-care, and stress management. A total of 24 sessions were conducted, with 1,118 participants, with a satisfaction rate of 93.1%. Sent 6,760 suicide prevention messages to parents of new students and produced advocacy videos.



Counseling Knowledge and Skills Enhancement of Faculty and Staff

Providing psychological expertise, student counseling, and stress management empowerment activities. A total of 11 sessions were conducted, with 765 participants, with a satisfaction rate of 94.6%.



Psychiatric Physician On-Campus Consultation

Providing medical consultation and psychological assessment. The five campuses provided 80 hours of service, benefiting 71 students. Of these, 29 were referred to external resources, demonstrating effective support for students facing mental health issues.

Monthly Counseling Newsletter and Podcast

The Counseling Group within the Office of Student Affairs regularly offers monthly counseling newsletters to assist readers in understanding mental health issues and their solutions, thereby promoting growth and development. In addition to the electronic monthly newsletter, a PODCAST audio file has been launched, allowing more people to listen on demand. A total of nine episodes were recorded in 2023, with 915 listeners.



Encountering You PODCAST

Support and Counseling for Extended Students

The support and counseling for extended students aims to assist those who need to extend their study period, helping them overcome challenges related to health, family, and personal issues, so they can successfully complete their studies and enhance their confidence, motivation, and academic achievement. In the 2023-2024 academic year, during both semesters, the Counseling Group sent 1,554 text messages and care letters to students who scored high on emotional assessments, ensuring that they can successfully complete their studies.



Care Letters for Extended Students

Professional Development Workshop for Counseling Staff

To assist university counseling staff in acquiring accurate knowledge of sleep medication use and cognitive behavioral therapy, the Counseling Group organized a two-day training workshop through the 'Ministry of Education's Subsidy for Higher Education Counseling Programs.' The workshop featured professional physicians and clinical psychologists who led eight lectures, enhancing participants' professional skills to help university students improve their sleep and quality of life, thereby promoting their physical and mental wellness.

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

NKUST conducted health education campaigns on topics such as healthy weight, tobacco control, sex education and HIV/AIDS prevention, first aid training, and infectious disease prevention and utilized online surveys and interactive physical games to enhance the health knowledge and first aid skills of both faculty and students. A dedicated nutritionist is employed to conduct nutrition education activities, promoting the concept of a healthy diet.

▼ Statistics on the Number of Sessions and Participants for the Academic Year 2022/2023

Event Topics	Session	People	Reach of Social Media Outreach
Healthy Weight	22	2,431	17,456
Sex Education and HIV/AIDS Prevention	9	1,264	12,022
Tobacco Control	46	3,696	13,369
First Aid Education and Accident Injury Prevention	19	1,302	1,302
Infectious Disease Prevention	11	1,419	20,655



- 1 Healthy Weight Themed Activity
- 2 Sex Education and HIV/AIDS Prevention Themed Activity
- 3 Tobacco Control Slogan Contest Poster
- 4 CPR+AED and BLS courses
- 5 The five campuses regularly hold blood donation events
- 6 Tobacco Use and Smoking Cessation Education for New Students



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 nine food vendors on campus, of which 88% offer vegetarian or vegan meals. These include the self-service cafeteria, Food Court, student dormitory restaurant, 6th Floor Restaurant at the Library, Food Court at the Nanzih Campus, Yanchao Campus Restaurant, Cijin Campus Restaurant, Jiangong Campus Restaurant.

Sustainable Restaurant Statistics for the Past 3 Years

Unit: Number of 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
2023	9	9	8
2022	10	10	8
2021	10	10	8



Plastic Reduction Policy

NKUST's outsourced operating lease agreements include provisions to reduce plastic waste, requiring vendors to refrain from using plastic and polystyrene utensils, including cups, bowls, plates, dishes, food containers, and plastic trays used for serving food. The provision applies to both dine-in and take-out. However, chopsticks and spoons for take-out are not subject to this restriction. Any policy changes will be implemented in accordance with government regulations.

Furthermore, NKUST adheres to relevant government regulations, such as the prohibition of providing disposable plastic bags or straws to consumers during dine-in. 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.



• Campus Food Ingredient Registration Platform

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 and Regulations for Information Security and Personal Data Protection in accordance with relevant regulations. In 2023, NKUST obtained the CNS 27001:2014 (ISO/IEC 27001:2013) certification. 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 audits of information security systems and assets, regularly assess risks, and adjust measures accordingly.

Methods for Identifying and Resolving Data Security Issues

① 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.
- 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.

② 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 a 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 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.

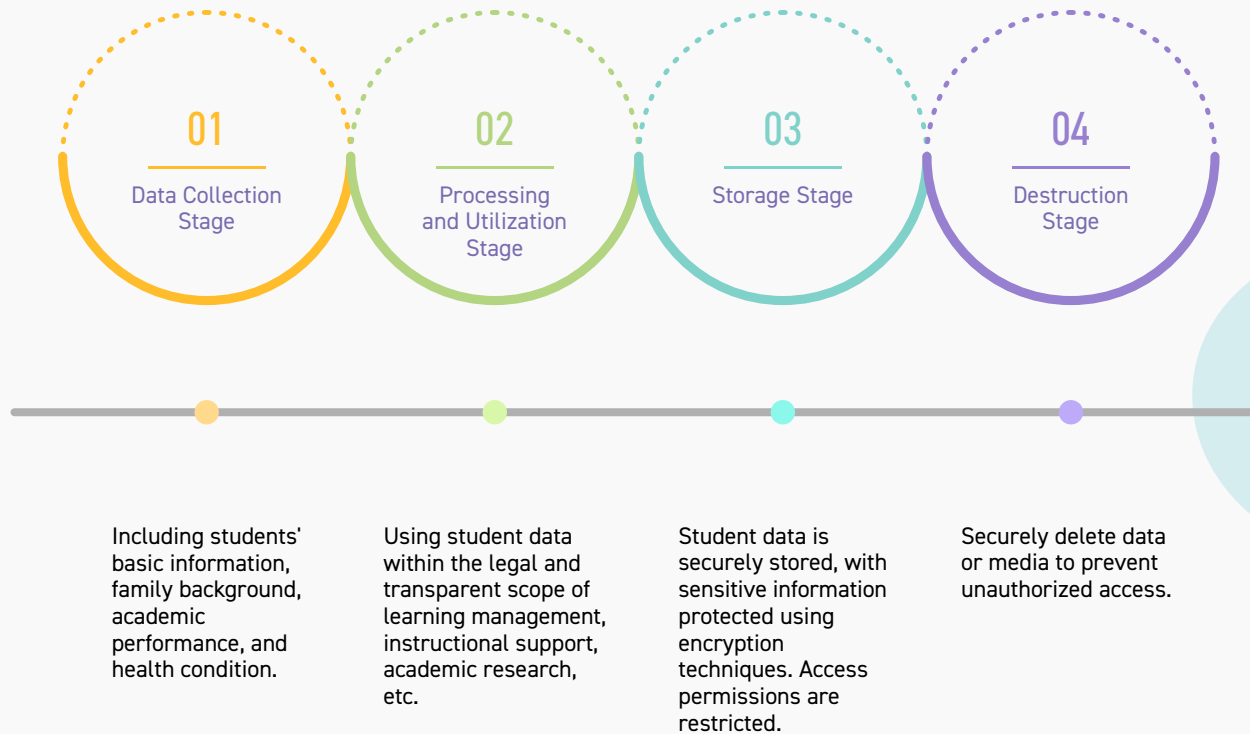


- ISO/IEC 27001 provides a network attack management system to address the multifaceted challenges of information security. Specific measures include:

- ① Regular risk assessments and vulnerability scanning should be conducted to promptly patch security vulnerabilities in the system.
- ② Develop a network attack response plan, including backup and recovery strategies, to swiftly address security incidents.
- ③ Provide education and training to enhance faculty and staff awareness of network security, particularly regarding social engineering and phishing attacks.
- ④ Regular vulnerability scanning and security reviews are conducted to identify and address potential security vulnerabilities in systems and devices.
- ⑤ Deploy network management software to enable real-time monitoring, allowing for prompt detection and defense against potential intrusions.
- ⑥ Implement secure network and system configurations, including disabling unnecessary services and ensuring device settings are secure.
- ⑦ 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 implementation focuses of each stage are described below:



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 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 customer data

03.

Cultivation of Innovative Talents

3.1	Admissions and Financial Aid	48
3.2	Sustainable Education	53
3.3	Campus Sustainability Practices	57
3.4	Sustainable Product Development	58

3.5	Academic Performance	59
3.6	Teaching Quality Assurance	65
3.7	Academic and Ethical Integrity	68
3.8	Career Counseling and Performance of Graduates	69





3.1 Admissions and Financial Aid

In 2023, the total number of students enrolled in our university is 28,069, of which 64.2% are male and 35.8% are female. Compared with the gender ratio of 79.5% male and 20.5% female in engineering, manufacturing, and construction-related departments and programs in colleges and universities as reported by the Department of Statistics in 2023, our university has a smaller gender disparity among enrolled students.

3.1.1 Diverse students

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

Unit: Number of Individuals

Type of Students		Number of males	Number of Women	Total
Day school	Doctoral program	418	146	564
	Master class	1,733	875	2,608
	Four-year Technical Program	10,885	6,586	17,471
	Two-year Technical Program	327	127	454
	Five-year Junior College	705	169	874
Division of Continuing Education	Four-year Technical Program	2,395	1,132	3,527
	Two-year Technical Program	188	154	342
	Master's Program	1,212	875	2,608
Institute of Continuing Education	Two-year Technical Program	157	129	286

▼ Statistics of the number of individual applicants for admission in the 2022/2023 academic year at our school

Unit: Number of Individuals

Type of Education System		Number of participants
Day school	Doctoral program	166
	Master class	3,087
Division of Continuing Education	Master's for working professionals	1,237
	Four-year Technical Program	1,368
	Two-year Technical Program	63
	Total	5,921

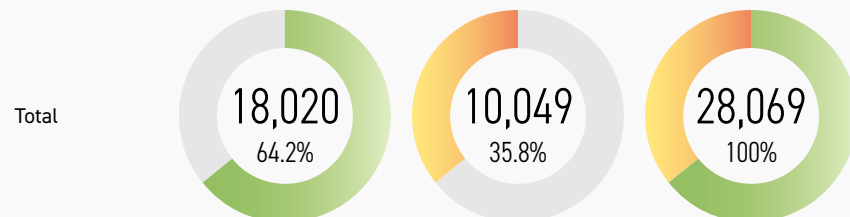
Statistical Breakdown of Student Diversity

In the 2022-2023 academic year, there were a total of 258 students with special educational needs (including 16 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 (88 students), followed by students with autism (75 students).

▼ 2023 Statistical Breakdown of Student Diversity

Unit: Number of Individuals

Type of Students	People
Special Education (including disabilities)	258
Indigenous peoples	
Mainland Chinese student	6
Hong Kong and Macau students	85
Overseas Chinese students	189
Foreign students	395



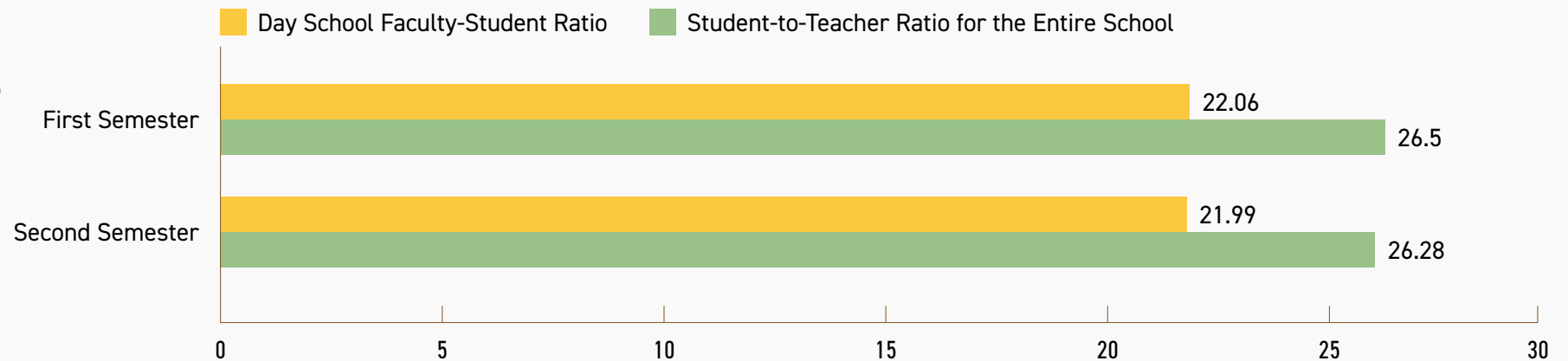


Establishing a Base for Expansion into Southeast Asian Countries

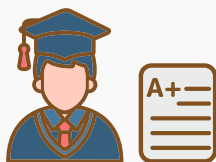
- Expand the cultivation of international student talent in alignment with the government's southbound policy and the promotion of vocational education. Actively sign dual-degree programs with sister schools in various countries to engage in extensive educational cooperation and recruit outstanding students 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 at Our School for the 2022/2023 Academic Year

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 2022/2023 academic year at our school are all in compliance with the standards, as depicted in the table below:



► The average total credits required for graduation per student in the 2022/2023 academic year



Education System	Average total credits
Five-year Junior College	224
Two-year Technical Program (Day)	74
Two-year Technical Program (Continuous education)	72
Four-year Technical Program (Day)	130
Four-year Technical Program (Continuous)	129

Education System	Average total credits
Doctoral program	33
Master class	38
Master's for working professionals	37
Institute of Continuing Education	72



3.1.2 Resource Classroom Counseling

The 2023 'Status of Counseling and Support Services for Students with Disabilities in Universities and Colleges' was reviewed and approved by the Taiwan Assessment and Evaluation Association.



Counseling Resource Links

- New Student Transition and Parent Meeting: This meeting aims to assess the learning characteristics and needs of new students, enhance parents' understanding of the school and resource room, and promote teamwork and communication. A total of 7 sessions were held, with 124 participants.
- Graduate Transition: Assess the employment needs and abilities of recent graduates, inviting representatives from labor agencies to participate and enhance career planning skills. A total of 9 sessions were held, with 73 participants.
- Special Education Implementation Committee: The Dean of Student Affairs, acting as chair, presides over five-campus video conferences each semester. These conferences facilitate cross-departmental resource connections and provide an understanding of the implementation status of special education services. A total of 2 sessions were held, with 48 participants.
- Special Education Document Review and On-Site Visits: The Ministry of Education's special education expert committee members regularly visit schools to understand the implementation of special education and provide practical feedback and recommendations. A total of 2 visits were made to the school, with 26 participants attending.
- Vocational High School Visit: Establishing connections with vocational high schools, enabling special education students to understand the role and function of resource rooms, and exploring options for university and college majors. A total of 53 teachers and students from the Resource Management Classes of National Cishan Agricultural & Industrial Vocational Senior High School and National Pei-men Senior Agricultural and Industrial Vocational School participated in two visits to the Nanzih Campus and Jiangong Campus.

Case Evaluation Services

- To foster a comprehensive understanding of student learning needs among department chairs, teachers, departmental secretaries, and parents, and to provide necessary assistance and resources, we employed assessment tools to gain insights into students' psychological adaptation and special education needs. Furthermore, this initiative aims to foster inter-unit teamwork and resource utilization efficiency, while supporting the development of ISPs and facilitating communication and collaboration between departments. Planning to hold a total of 60 sessions, with 707 participants.
- Academic Support: Based on individual students' disabilities and academic needs, appropriate tutoring hours were provided to enhance their departmental and subject-specific knowledge, facilitating successful completion of their studies. In 2023, 76 students received support, totaling 2,175 hours of tutoring.

Campus and Life Adjustment Counseling Activities

- Through campus and life adjustment counseling activities, we fostered interaction among students in the resource room, cultivating interpersonal interaction, social communication skills, and respect for others. A total of 50 sessions were held, with 847 participants, and the overall satisfaction rate reached 94%.

Advocacy for a Friendly Campus for Special Education

- Through special education experience and outreach activities, the program aimed to enhance the special education knowledge and psychological acceptance of special education students among all faculty, staff, and students. A total of 60 sessions were conducted, with 1,819 participants.

► Club Carnival Special Education Outreach Event at the First Campus



Career Counseling Activities

- Through diverse career counseling activities, we assist special education students in self-discovery and value formation. We help them clarify the gap between their current situation and their aspirations, and provide appropriate direction for their future career choices. A total of 6 sessions were held, with 86 participants, and the overall satisfaction rate reached 92%.

► UCAN Competency Assessment and Analysis at the Nanzih Campus



Multifaceted Learning and Growth Seminar

- By cultivating self-management and time management skills, the Resource Room students can enhance their professional and life knowledge. Developing extracurricular skills and basic workplace abilities will help them discover their potential career capabilities. A total of 26 sessions were held, with 302 participants.



Peer Support Counseling

- **Peer Support and Companionship:** Peer mentors provide support, fostering positive interactions between students in the resource room and their peers. Learning companions can promptly inform guidance personnel to address challenges students encounter in their studies or group work, helping students stabilize their emotions and focus on their academic pursuits.
- **Peer-to-Peer Learning:** Students from the Resource Center and their peers serve as teaching assistants, providing support for students' daily lives and academic studies. Simultaneously, they undergo training in workplace ethics and reception etiquette, fostering fundamental work attitudes and offering financial assistance. A total of 104 individuals participated in 2023, with a total of 6,597 hours of execution time.

3.1.3 Support for Economically Disadvantaged Students

NKUST is committed to enhancing the public nature of higher education, particularly by providing multifaceted support to economically disadvantaged students. This support includes 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

The 2023 Higher Education SPROUT Project actively supported economically disadvantaged students, awarding scholarships to 3,246 individuals, totaling NT\$17,657,682. The following are the characteristics of each program:

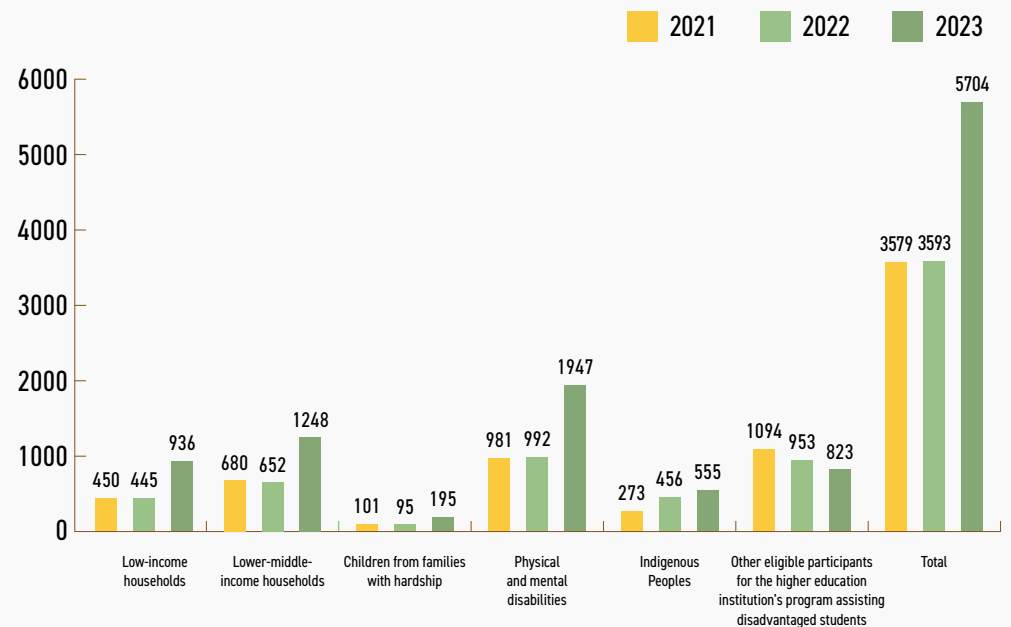
- **Career Counseling and Employment Collaboration Assistance Program:** This program included 18 recruitment briefings and 4 physical job fairs, successfully connecting students with companies such as Yang Ming Marine Transport, Applied Materials Taiwan, Taiwan Cooperative Bank, and Heineken, offering diverse occupational choices. The program also provided the 'Internship and Employment Expert Network Online Matching Platform,' assisting 122 individuals in finding employment and providing relevant counseling to 80 individuals and disbursing rewards totaling NT\$229,790.
- **License Guidance Incentive Subsidy Program:** A total of NT\$733,892 in rewards has been issued, benefiting 276 individuals. This program assisted students in covering the costs of obtaining certifications and promoted their career development. A total of 151 professional and language certificates were obtained by students this year.
- **Academic Learning and Empowerment Program:** A total of NT\$17,117,000 in rewards has been issued, benefiting 2,116 individuals. This program supports students' autonomous learning and professional development, contributing to enhanced learning outcomes and professional skills. It has successfully nurtured numerous students who have gone on to pursue graduate studies and secure positions at renowned companies in their respective industries.

Enhancement of Learning Equipment and Resources

- By providing access to educational aids and learning equipment, the resource room mitigates the inherent limitations faced by students with disabilities, creating a stable and equitable learning environment. This, in turn, enhances student learning effectiveness and promotes professional skill development. In 2023, a total of 76 individuals received services related to learning equipment and assistive devices.

NKUST's Extracurricular Activities Division has established the National Kaohsiung University of Science and Technology 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





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

Name of the Incentive Items	Number of recipients granted	Amount Issued
Academic Learning Support (Learning Achievement)	974	1,606,000
Student Self-Learning Program (Academic Learning)	1,748	12,236,000
Assistance in Career Planning and Counseling	202	229,790
License Guidance	276	733,892
Enhancing Learning and Development for Outstanding Students (Empowerment and Capacity Building)	368	2,852,000
Total	3,568	17,657,682

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

Years	Number of recipients granted	Amount Issued
2023	3,568	17,657,682
2022	4,384	17,657,682
2021	2,303	20,448,545

▼ Application Status of Various Financial Aid Measures

Various Measures to Assist Students	Number of applicants	Requested amount
Tuition and miscellaneous fees exemption	4,940	84,412,430
Student Loans	8,430	253,764,064
Living Assistance Fund	850	5,100,000
Scholarship for Underprivileged Students in Higher Education Institutions	823	11,250,750
Emergency Relief	91	905,000
Free tuition for the first three years of the Five-year Junior College Program	884	6,708,205
Subsidy for Off-Campus Accommodation Rent	433	6,373,680
Total	16,451	368,514,129

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

Various Measures to Assist Students	2023	2022	2021
Tuition and miscellaneous fees exemption	Requested Amount (NTD)	82,592,633	84,624,460
	Number of applicants	4,845	4,961
Student Loans	Requested Amount (NTD)	253,764,064	260,697,836
	Number of applicants	8,430	8,809
Other Scholarships and Bursaries	Requested Amount (NTD)	30,337,635	43,177,363
	Number of applicants	3,081	3,375
Total	Requested Amount (NTD)	366,694,332	388,499,659
	Number of applicants	16,356	17,145



3.2 Sustainable Education

3.2.1 Sustainable courses

The university's curriculum integrates three distinct development advantages and characteristics: pro-production and high quality, innovation and entrepreneurship, and marine science and technology. In the 2022/2023 academic year, a total of 1,344 sustainability-related courses were offered (87 in the five-year junior college, 1,037 in the undergraduate department, and 220 in the graduate institute). Seventy departments and centers provided at least one sustainability course, with 46 departments including sustainability courses as mandatory credits.

The sustainable curriculum for the 2022/2023 academic year is primarily focused on three core sustainable goals: Preserving marine and terrestrial ecosystems, Industrialization, innovation, and infrastructure, and Quality Education. Secondary goals encompass Sustainable Cities and Communities, Health and Well-being, Decent Work and Economic Growth, and Affordable and Clean Energy. These objectives are deeply integrated into curriculum development and design, enabling students to comprehend international trends and acquire the skills and competencies necessary to confront future generational challenges.

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

College/Center	Undergraduate Department			Graduate School			Five-year Junior College			Whether There Are Any Required Credits		
	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
College of Engineering	105	106	114	54	58	49	13	8	9	Yes	Yes	Yes
College of Intelligent Mechanical and Electrical Engineering	24	-	-	4	20	-	9	-	-	Yes	Yes	Yes
College of Electrical Engineering and Computer Science	42	36	36	24	19	26	-	20	-	Yes	Yes	Yes
College of Maritime	110	70	68	20	35	19	27	23	17	Yes	Yes	Yes
College of Hydrophere Science	206	181	160	33	9	43	29	-	9	Yes	Yes	Yes
Business Intelligence School	38	30	29	12	52	15	-	-	-	Yes	Yes	Yes
College of Management	65	67	41	46	21	27	-	-	-	Yes	Yes	Yes
College of Marine Commerce	58	49	46	18	3	18	-	-	-	Yes	Yes	Yes
College of Innovation and Design	14	-	-	6	4	-	-	-	-	Yes	Yes	Yes
College of Foreign Languages	13	16	20	3	3	2	-	-	-	Yes	Yes	Yes
College of General Education	336	36	272	-	-	-	9	-	-	Yes	Yes	Yes
Innovation and Entrepreneurship Education Center	23	26	24	-	-	-	-	-	-	No	No	No
Cross College Elite Tech Program at NKUST	3	3	-	-	-	-	-	-	-	Yes	-	-
Total	1,037	918	823	220	224	213	87	57	41	-	-	-





I-Turn Local Revitalization Program

Simultaneously, the interdisciplinary 'I-Turn Local Revitalization Program' was launched, hosting a 'Taiwan-Japan Exchange Local Revitalization Workshop.' This workshop invited eight students and two professors from Kochi and Chiba Universities in Japan. Participants visited Donggang and Xiaoliuqi, gaining insights into local cultural characteristics and engaging in sea turtle conservation and coastal ecological environment observation. Leveraging the partnership of the Taiwan-Japan Alliance of Local Revitalization and Social Practice, students from Taiwan and Japan were grouped together for intensive coursework within the project site. Through cross-national collaborative field trips, internships, practical exercises, exploration, lectures, experience sharing, and mutual exchange, students were encouraged to brainstorm solutions. Furthermore, students were encouraged to participate in the 'Towards International Common Goods - Regional Caring Practice Competition,' fostering practical experience and skills. This initiative effectively cultivates cross-national and interdisciplinary talent in the field of local revitalization.

3.2.2 Continuing 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.' NKUST's Continuing Education program, in response to current trends and following consultations with relevant industries, has developed sustainable development-related courses. These courses are designed to enhance the competitiveness of corporate products in the international market. They provide both academic and non-academic employees with opportunities for learning and training in sustainability-related fields. The program also aims to serve local industries and assist them in keeping pace with future trends and government policies. These include courses such as Electric Vehicle Maintenance, ISO 14067 Carbon Footprint Verification Bachelor Credit Class, ISO 14064:2018 Greenhouse Gas Emission Verification Bachelor Credit Class, ESG Literacy Training and Corporate Sustainability Bachelor Credit Class, ESG Internal Verification Officer TUV NORD Certification Class, Indoor Air Quality Maintenance Management Responsible Personnel, Environment and Greenhouse Gas Management and Carbon Footprint Lead Auditor/Assurance Officer/Verification Officer Specialized Class, and Circular Economy Industry Talent Training Class.

In the 2022/2023 academic year, NKUST offered 37 credit classes (independent specialized classes), with 814 enrollments, generating total revenue of NT\$7,255,239. Non-credit classes were offered in 252 classes, with 7,573 enrollments, generating total revenue of NT\$85,018,338. This includes the Senior University, which offered 16 classes (over two semesters), with one class receiving a subsidy from the Ministry of Education. We have continued our collaboration with the Kaohsiung City Government to implement the Kaohsiung City Pipeline Excavation Project Management Personnel Certification Program, courses at the Citizens' Academy, and the Kaohsiung-Pingtung-Penghu-Taitung Regional Branch of Workforce Development Agency's Talent Investment Program and New Talent Program, promoting sustainable development and lifelong learning.

▼ Number of Courses Offered in Continuing Education in the Past Three Years²³

Item	2022/2023 Academic Year	2021/2022 Academic Year	2020/2021 Academic Year
Total number of courses	289	527	447
Sustainability-Related Courses	8	95	59
Number of Graduates	8,387	8,723	3,952

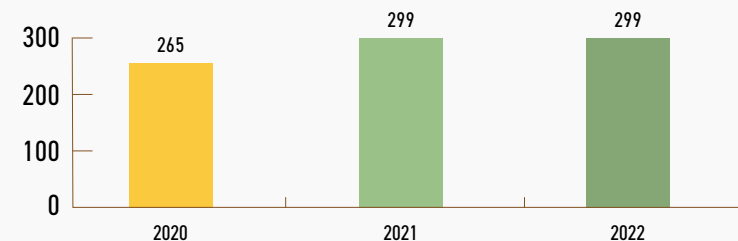
3.2.3 Continuing Education

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



²³ NKUST's continuing education courses provide development and training for both academic and non-academic employees.



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 two consecutive years (2022-2023). We have offered 12 courses, attracting 2,800 students and achieving 45,260 video views. In the same year, NKUST offered four courses on the ewant platform for high school students to learn independently. These courses were selected by 64 high schools and vocational schools to be offered in 86 specialized classes, with a total of 3,395 high school students participating. This initiative further promoted the dissemination of professional knowledge and provided opportunities for high school students to engage in independent learning under the new curriculum guidelines.

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 2023, there were 1,447 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 2022/2023 academic year, more than one-fifth of courses utilized ZUVIO for real-time feedback in teaching. The average number of student interactions per week across the entire school exceeds 43,000. 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. Since its launch in the second semester of the 2018/2019 academic year, usage has increased annually, becoming the primary online learning support in the 2022/2023 academic year. During the pandemic, it was a crucial teaching tool.

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

Unit: Number of Individuals

	2022/2023 Academic Year	2021/2022 Academic Year	2020/2021 Academic Year
Number of users on the teaching platform	2,444,529	2,818,580	1,885,285

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.

NKUST's General Exploration Course on Marine Science and Technology has implemented a modular design approach with 14 thematic modules. Subsequently, in recognition of the need to enhance teaching quality and address student course enrollment requirements, the course delivery method was revised to a single-class teaching approach for each of the 10 themes, starting from the second semester of the 2020/2021 academic year. This change has resulted in an increase in the number of classes offered and the number of students enrolled. During the 2022-2023 academic year, a total of 31 general education courses on marine technology exploration were offered, with a total enrollment of 2,010 students. The course offerings for the 2022/2023 academic year are as follows:

▼ Statistics of Enrollment in the General Exploration Course on Marine Science and Technology for the 2022/2023 Academic Year

Academic Year	Number of Courses	Campus where the course is offered	Number of Students Enrolled
2022-1	16 Sessions	First, Nanzih, Yanchao, Jianguo, and Cijin	1,096
2022-2	15 Lessons	First, Nanzih, Yanchao, Jianguo, and Cijin	914
Total			2,010

The aforementioned Marine General Education Courses hold a 'Date with the Ocean' 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. Furthermore, 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 2023, a total of 14 ocean education activities were conducted, engaging a collective of 3,365 participants.

Chiayi City Science 168 Education Expo

NKUST participated in the Chiayi City Science 168 Education Expo from July 14 to 18, 2023, promoting marine knowledge and skills. The event, titled 'NKUST's Office of Marine Science and Technology - The Beauty of Our Homelands and Life with Water,' aimed to foster student understanding of the interconnectedness of life, the environment, and humanity. Activities included a DIY ecological bottle experience, introductions to common aquatic plants and ornamental shrimp, and information on how ecological bottles are suitable for home decoration and allow children to observe plant changes. The exhibition attracted 2,551 elementary and middle school students.



▲ Challenge Booth of the Chiayi City Science 168 Education Expo

'Heart to Heart, Pure Diligence Flows Through the Pond' – Promotion Event of Lotus Pond's Tribute to the Sea

In observance of National Ocean Day, NKUST organized the 'Heart to Heart, Clean and Flowing Lotus Pond' Lotus Pond - Paying Tribute to the Sea Outreach Event on June 8, 2023. The event focused on Stand Up Paddleboarding (SUP) and water safety education, featuring specially designed water safety education curriculum. High school, junior high, and elementary school students were prioritized as participants, aiming to enhance the public's knowledge of water safety. By employing an engaging and entertaining learning approach, we aimed to enhance public awareness of marine culture. Through experiential and challenging learning activities, participants would cultivate personal growth and achievement, ultimately leading to a deeper understanding, appreciation, and love for the ocean. This event not only allowed participants to explore new fields and build new knowledge, but also, by combining dynamic and static elements, helped participants grow. The event was conducted in five sessions, attracting students from all levels of education and working adult, totaling 123 participants.



▲ 'Heart to Heart, Pure Diligence Flows Through the Pond' – Promotion Event of Lotus Pond's Tribute to the Sea

Micro-Ecological Intelligent Light-Controlled Aquarium Production Experience

On October 28, 2023, NKUST's Office of Marine Science and Technology collaborated with Wu-lin Elementary School to host the 'Micro-Ecological Intelligent Light-Controlled Aquarium Production Experience,' guiding students in building their own intelligent aquariums, featuring an introduction to marine ecology and hands-on aquarium construction. By integrating aquaculture and electronics, this interdisciplinary approach helped students combine knowledge from different fields, fostering their understanding of marine ecology, intelligent light control devices, and the overview of related industries and talent needs. It cultivated respect for all forms of life and promoted ecological conservation concepts. Through practical experience, students gained a more intuitive understanding of ecosystem functioning and how to use smart technology to simulate and control natural environments. A total of 21 individuals participated in this event.



▲ The 'Micro-Ecological Intelligent Light-Controlled Aquarium Production Experience' Guided Students in Building Intelligent Aquariums

Maritime Professional Training and Offshore Wind Power Talent Development

NKUST supports the government's coastal tourism and recreation development initiative by offering training for commercial powerboat operators. We offer discounted rates to students interested in obtaining professional licenses. Since 2019, 12 professional training courses have been conducted, totaling 186 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 2024.

In response to our country's renewable energy development policies, NKUST is actively promoting an offshore wind power workforce training program. We have dispatched our school teachers to participate in training at overseas wind power training centers to acquire GWO BST and GWO BTT training certificates. This initiative aims to develop our instructors as qualified trainers. The GWO BST training has been offered since 2020, followed by the launch of the GWO BTT training in 2021, creating diverse employment opportunities for students at NKUST. To date, eight GWO BST training sessions have been conducted for internal teachers and students, and eight GWO BTT training sessions have been conducted.

3.3 Campus Sustainability Practices

3.3.1 Sustainable Clubs

There are two sustainability-related student clubs on campus: the Diving Blue at the Nanzih Campus and the Water Activities Club at the Jiangong Campus. Both clubs align with SDG 14, Life Below Water.



▲ The Sustainable Club of Our School - Diving Blue

3.3.2 Sustainable-related activities

Sustainable development is a long-term goal and direction that can be promoted to more faculty and students through outreach and activities. In 2023, NKUST hosted a total of 11 sustainability-related activities, including 5 on-campus and 6 off-campus activities. A total of 1,307 students participated. The activities encompassed multiple student clubs, including the Chin-Ying Club at the Cijin Campus, the Water Activities Club at the Jiangong Campus, the Diving Blue and the Chung Tai Chan Monastery at the Nanzih Campus, as well as the Hai-Yu Badminton Club and the Shipbuilding and Ocean Engineering Society at the Nanzih 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	5	508
Off-campus Activities	6	799
Total	11	1,307

3.3.3 Service Learning and Rural Service

In 2023, NKUST provided service learning and rural services to 18 elementary and junior high schools, serving a total of 487 students. The Wind Band held a camp titled 'Seeking Sound' at Wun-Fu Elementary School, Kaohsiung. The camp not only provided instruction on music history and instrument types but also allowed children to experience instruments firsthand and culminated in a performance showcase. This aligns 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, prompting them to reflect on their own contributions to society.

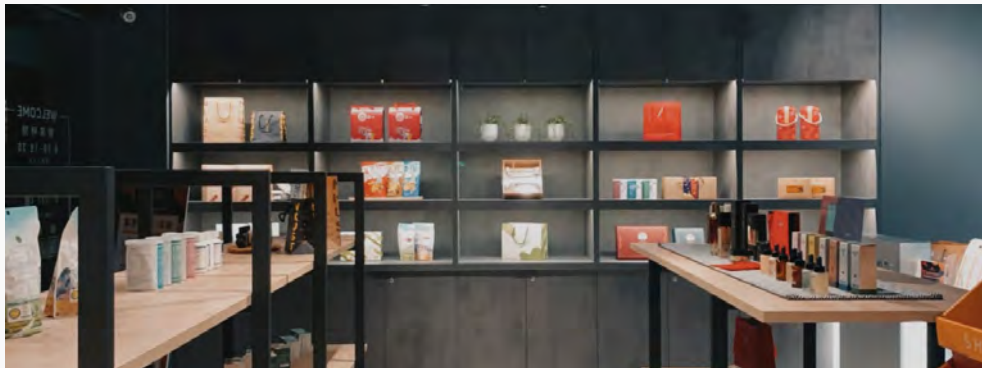
- The 'Professional Service Education' course: Aiming to integrate academic expertise with service education concepts. It cultivates students' ability to apply their professional knowledge to solve real-world problems, while incorporating the Sustainable Development Goals (SDGs). For example, professors from the Department of Mechatronics Engineering guide students in conducting campus air pollution surveys and river patrols, and they regularly record water quality data. In 2023, 231 students participated in these activities. Improving air quality through data monitoring and promoting energy conservation and carbon reduction. Furthermore, through the Campus Public Bicycle Maintenance Program, 135 students participated in improving and maintaining bicycles, adding safety equipment such as taillights and turn signals. The program also provided basic training to cultivate students' repair skills, promoting a sense of social service.
- The 'Social Service Education' courses: Encouraging students to independently seek out social service organizations, such as NGOs or NPOs, or to participate in school-provided service activities for vulnerable groups and non-profit organizations. These courses also integrate the principles of the Sustainable Development Goals (SDGs). Through collaborations with external organizations and internal units, the courses provide auxiliary services with social benefits, fostering students' sense of social responsibility and service spirit.

NKUST collaborates with multiple organizations, including Hua Yuan Children's Tutoring Center, Hua Shan Social Welfare Foundation, Sun and Moon Light Community Care Service Center for Children and Youth. In 2023, a total of 53 students voluntarily registered for community service learning, serving underprivileged children and elderly individuals living alone. These activities aim to stimulate students' self-reflection and humanistic concern, and to cultivate a sense of responsibility to 'take from society and give back to society.'



3.4 Sustainable Product Development

The 'High-Tech Boutique' – DK SHOP, launched by NKUST's Product Promotion Center, opened on November 5, 2020. This shop features products developed collaboratively by faculty, students, and through industry-academia collaboration. This branded store is the first of its kind among all universities and colleges in Taiwan, showcasing innovative products and souvenirs developed by teachers and students. It demonstrates the unique value of 'our school brand.' DK SHOP, adhering to the principle of 'SDG 12 Responsible Consumption and Production,' is committed to the sustainable management and efficient use of natural resources. Through prevention, reduction, recycling, and reuse, the company effectively minimizes waste. Products encompass food, cosmetics, and household goods, with production processes jointly developed and overseen by faculty and students. Products are stocked based on seasonality and origin, providing consumers with safe, reliable, and fresh high-quality goods.



▲ DK SHOP Retail Store of NKUST

Pineapple Collagen QQ Jelly

This product is developed in collaboration with Hong Yu Foods Co., Ltd. It utilizes pure, natural collagen extracted from marine byproducts (squid collagen). Through hydrolysis technology, large-molecule collagen is broken down into small-molecule collagen peptides, resulting in a product rich in collagen peptide essence that is easily digested and absorbed by the human body. Combined with pineapple juice, it offers a refreshing pineapple flavor with no fishy taste, making it easy to consume. The individually packaged design is convenient for carrying. The product exhibits excellent swelling and elasticity, contributing to improved complexion.



▲ Pineapple Collagen QQ Jelly

Tiger Grouper Biscuit

▼ Tiger Grouper Biscuit

This product is made in collaboration with 'Su Class Leader Anxin Fish Farm' in Yong'an Township, Kaohsiung, using by-products from their cultured grouper. Processed using advanced techniques to extract a powder rich in calcium and trace elements, with minimal additives. This powder incorporates the fresh flavor of local seafood, enhancing the overall taste and texture. Collaborate with local partners to promote and sell products, expanding market channels. This product has received the 2-star 'Superior Taste Award' from the International Taste & Quality Institute (ITQI) in Belgium in 2023 and the 2-star 'Food Innovation Award' in 2022. It effectively utilizes fish bone byproducts from seafood processing, embodying circular sustainability. This not only promotes environmental friendliness but also delivers exceptional taste.



To effectively manage its brand, NKUST has implemented a rigorous product listing review process through the operation of the Product Listing Sales Review Committee. This process ensures the quality of listed products and enhances marketing performance, ultimately achieving the goal of sustainable brand management. The table below presents the review status of products listed on DK SHOP from 2021 to 2023. All products that have been reviewed and listed have obtained authorization from the school emblem.

▼ Statistics on Trademark Licensing Cases Over the Past Two Years

Year	Number of Reviewed Products Approved	Number of Reviewed Products Not Approved	Best-Selling Product Representatives of the Year
2023	26	0	 Color-Changing Mug
2022	40	0	 Outstanding Bone Builder

In response to the Ministry of Education's policy and to effectively implement the university's social responsibility initiatives, a Social Responsibility Office has been established under the Office of Industry-Academia Collaboration and Operations. An annual report on the NKUST's Social Responsibility Annual Report is published and available for online viewing. Furthermore, NKUST's Office of the Secretariat publishes a monthly School Newsletter to promote the dissemination of knowledge and learning related to sustainable development.



• NKUST's Social Responsibility Annual Report



• School Newsletter



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 2023, our university implemented a total of 311 research projects, with 199 related to sustainability, accounting for approximately 63.99%. 178 (faculty) members led these sustainability-related research projects. 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, achieving this goal will result in additional weight being applied to each published paper's scoring. A total of 796 journal articles were published by our faculty, with 340 of them related to sustainability issues, accounting for approximately 42.7%. This represents a growth of about 13.1% compared to last year (29.6% in 2022), demonstrating our faculty's commitment to sustainability-related issues and the ongoing development of our faculty's research in sustainability-related topics.

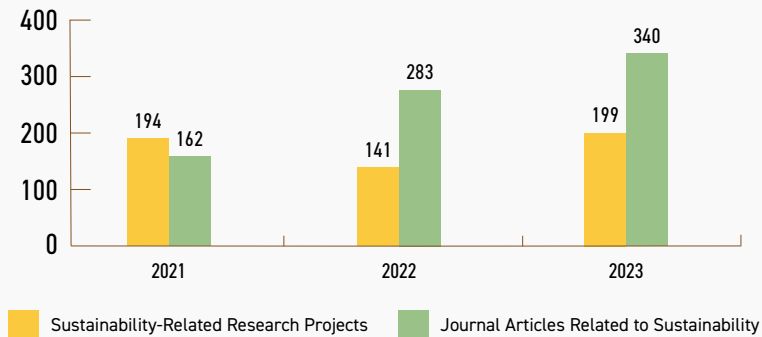
▼ Statistics of Sustainable Research Projects and Papers

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	50	35	154	62
College of Intelligent Mechanical and Electrical Engineering	52	26	102	20
College of Electrical Engineering and Computer Science	61	30	122	40
College of Maritime	20	15	40	18
College of Hydrophere Science	39	32	236	142
Business Intelligence School	14	11	44	19
College of Management	43	29	53	17
College of Marine Commerce	12	8	28	13
College of Finance and Banking	0	0	2	2
College of Innovation and Design	7	5	1	1
College of Foreign Languages	5	2	5	3
College of General Education	4	3	6	2
Innovation and Entrepreneurship Education Center	0	0	1	1
Cross College Elite Tech Program at NKUST	3	2	0	0
Office of Academic Affairs	1	1	0	0
Physical Education Office	0	0	2	0
Total	311	199	796	340

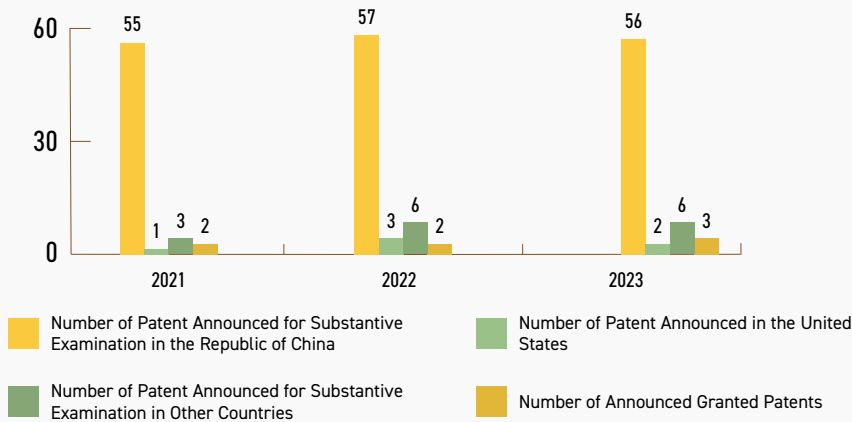




▼ The Number of Sustainability-Related Research Projects and Journal Articles in the Past 3 Years



▼ Patent Statistics for the Past Three Years at NKUST



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 2023, our school's faculty members published a total of 796 journal articles. Among them, 367 articles were published in Open Access journals, accounting for approximately 46.1% 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

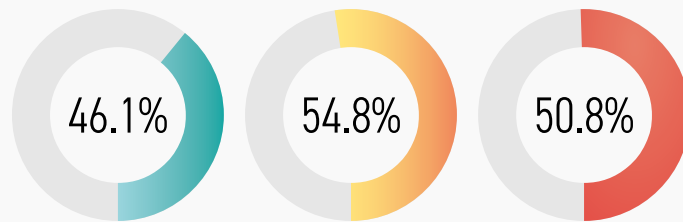
College/Center	Total Number of Published Journal Papers	Number of Open Access Journal Articles	Proportion of Open Access Journal Articles
College of Engineering	154	65	42.2%
College of Intelligent Mechanical and Electrical Engineering	102	47	46.1%
College of Electrical Engineering and Computer Science	122	77	63.1%
College of Maritime	40	25	62.5%
College of Hydrophere Science	236	99	41.9%
Business Intelligence School	44	16	36.4%
College of Management	53	13	24.5%
College of Marine Commerce	28	17	60.7%
College of Finance and Banking	2	2	100%
College of Innovation and Design	1	1	100%
College of Foreign Languages	5	1	20%
College of General Education	6	2	33.3%
Innovation and Entrepreneurship Education Center	1	1	100%
Cross College Elite Tech Program at NKUST	0	0	0
Office of Academic Affairs	0	0	0
Physical Education Office	2	1	50%
Total	796	367	46.1%



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

Type	2023	2022	2021
Total Number of Published Journal Papers	796	958	844
Number of Open Access Journal Articles	367	525	429

Proportion of Open Access Journal Articles



3.5.3 Collaborative Sustainable Industry-Academia Projects

The university is committed to promoting sustainable development across multiple disciplines and establishing close industry-academia partnerships with businesses, effectively integrating faculty expertise with industry needs. Through close collaboration with businesses across various industries, NKUST not only leverages government subsidies but also actively engages in issues related to corporate social responsibility and green energy reduction. Through continuous technological advancements, a close and enduring partnership has been established between the school and industry. Leveraging our accumulated wealth of collaborative experience and robust research and development service capabilities, we are not limited to a single field but are further deepening industry-academia partnerships. While achieving outstanding results in the field of research, the university actively applies research findings to industry, promoting sustainable development in the region.

In Response to the Global Movement Towards Net-Zero Carbon Emissions

NKUST assists the manufacturing industry in embracing sustainable development, focusing on carbon emissions reduction and low-carbon core technologies and services. We also introduce smart manufacturing and operational management optimization. 20 faculty members undertook 64 carbon footprint diagnosis services and carbon reduction research projects, with a total investment of NT\$17.57 million. They led students in conducting carbon footprint assessments and technical diagnoses for 57 companies, and assisted 7 companies in successfully applying for government subsidies for industrial upgrading and transformation research and development. These efforts have propelled NKUST and industry toward a low-carbon and smart transformation, aiming to achieve the global goal of net-zero carbon emissions.

Furthermore, NKUST assisted ASE Technology Holding Co., Ltd. in developing a technology titled 'Optimizing Temperature Parameter Settings for Equipment Ovens Using Artificial Intelligence for Energy Management.' The objective is to optimize and reduce energy consumption by 10% in a multi-process, multi-product, and multi-model environment, effectively enhancing energy management efficiency and gradually advancing the achievements of green manufacturing processes.

Sustainable Collaboration in Diverse Fields

NKUST's focus areas for sustainable development include smart manufacturing, intelligent commerce, marine technology, and technology and cultural creativity. These areas represent future industry development trends and offer multiple opportunities. Through cross-disciplinary collaboration, schools and businesses jointly improve technology and processes, while simultaneously reducing negative environmental impacts. In 2023, the focus was on bioenvironmental testing, industrial decarbonization, and green finance, resulting in the implementation of 80 sustainability-related industry-academia projects with a total investment of approximately NT\$63.04 million.

Industry-Academia Collaboration and Intelligentization Promotion

NKUST's industry-academia collaboration extends beyond participation in research projects. We actively promote the application of smart manufacturing and artificial intelligence, assisting enterprises in improving product manufacturing process safety management and providing technical services. To encourage academic institutions and enterprises to collaborate in high value-added application technology fields. In 2023, we continued to promote STEM interdisciplinary research participation among faculty and students in non-STEM fields, and we are committed to creating a research environment that is welcoming to women. Our objective is to cultivate professionals who will contribute to the sustainable development industry.

Sustainable Development of Marine Science and Technology

NKUST has made significant progress in the application of marine technology. The school actively participates in projects related to aquaculture and strive to enhance farming techniques to produce higher quality aquatic products. Simultaneously, the school conducts research on the application of technology, ensuring the sustainability of the marine environment and resources.

The content of marine technology industry-academia collaboration encompasses multiple aspects, including green energy, environmental protection, safety, pollution issues, education, and aquaculture. For example, continued investment in the Kaohsiung Port New Dredging Sediment Ocean Disposal Monitoring Program and the Mailiao Fishermen's Aquaculture Technology Project supports environmental conservation and the sustainable development of fisheries.

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 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.



• Industry-Academia Collaboration Platform

Taiwanese Grouper: A New Journey from Origin Certification to International Brand

NKUST, with the support of the Fisheries Agency, Council of Agriculture, is dedicated to enhancing the international recognition and visibility of Taiwanese grouper. We have conducted in-depth research on the aquaculture environment, established production traceability records, and formulated market development strategies. Furthermore, we are actively engaged in developing and improving cold chain technology for aquatic products. We are also diversifying the processing of grouper products and launching the 'Taiwanese Grouper' brand, emphasizing the values of 'Taiwan Traceable Aquaculture' and 'Taiwan Safe Processing.' We assisted aquaculture producers in Kaohsiung and Pingtung in joining the Origin Certification Label Alliance to market their products collectively. Through the concept of utilizing the entire fish and refined processing, we have successfully opened market channels in Taiwan, Japan, and Malaysia. In the future, we will continue to promote the 'Taiwanese Grouper' brand, enhance consumer brand resonance, and further improve the product's international competitiveness.



▲ Taiwanese Grouper Origin Certification Label and Cold Chain & Processing Application Results Presentation

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

		2022	2021
Number of Industry-Academia Collaboration Projects	737	628	648
Number of Sustainability-related Industry-Academia Collaboration Projects	88	125	230
Amount of Sustainability-related Industry-Academia Collaboration Projects	76,749,036	205,317,377	199,789,172

3.5.4 Sustainable Government Collaboration Projects

In 2023, our university undertook a total of 123 industry-academia collaboration projects with government agencies, among which 25 were related to sustainable development, amounting to a total of NT\$649 million. These 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 2023 Kaohsiung City Marine Conservation Education Promotion Project, Wildlife Education and Advocacy Program, and Open Water Sports Education Center Project. In terms of marine ecosystem conservation, this includes the 2023 Marine Pollution Incident Response Simulation Monitoring Project, the Indian Ocean Shark Fishery Resource Assessment and Risk Assessment Study, and the Kaohsiung Marine Environment Monitoring Program. Regarding addressing climate change issues, there are plans for developing adaptation action plans for fisheries production, as well as research on carbon sequestration monitoring technologies for oceans and wetlands.

2023 Kaohsiung City Marine Conservation Education Promotion Project 4 14

To enhance public awareness of ocean conservation, the United Nations has designated June 8th as 'World Oceans Day.' This day specifically calls upon individuals to focus on issues related to the marine environment and ecosystem. In this context, the Kaohsiung City Government's Marine Bureau commissioned NKUST to organize the 2023 Marine Conservation Education Promotion Project, launching a marine education tour train activity, aiming to cultivate in children a respect for marine life and a love for the environment.

The program encompasses four thematic courses, including Fishery Education, Marine Biodiversity Conservation, Ocean Crisis, and Bycatch Issues. Through these courses, students delve into the mysteries of the ocean and learn the importance of protecting marine resources. Furthermore, the program strengthened the promotion of tsunami disaster prevention and water recreation safety, enhancing students' awareness of water safety.

The activities were planned and conducted in rural, coastal, mountainous, urban, and special schools in Kaohsiung City, totaling 40 sessions with over 1,600 teachers and students participating. Through activities such as identifying marine debris and interactive games, students not only deepened their understanding of sustainable oceans and conservation but also enjoyed an unforgettable ocean adventure.



▲ 2023 Campus Tour Train Activity Report



Drafting an Adaptation Action Plan for Domestic Fisheries Production in Response to Climate Change and Net-Zero Emissions 13

The uncertainties and changes in the natural environment brought about by climate change increase the challenges for policymakers in formulating fisheries adaptation policies. The formulation of fisheries adjustment strategies is influenced by the multiple objectives and values of stakeholders, making it difficult to accurately predict and plan. This project primarily supports Sustainable Development Goal 13, 'Climate Action.' It focuses on exploring cross-sectoral governance adaptation planning at the regional level under different future temperature rise scenarios. By incorporating assessments of societal risk perception and risk acceptance into the risk governance process, and engaging actively with stakeholders, we can bridge the gap in adaptation understanding and increase the likelihood of consensus formation. This will contribute to establishing an integrated risk governance model, driving decision-making closer to the actual needs of society, and enhancing the willingness of all parties to participate in adaptation actions, achieving the goal of public and private sectors working together to address climate challenges.

This project aims to integrate opportunities for the fisheries industry in Taiwan to address climate change. It will conduct case studies using stakeholder representative examples and employ the Task Force on Climate-Related Financial Disclosures (TCFD) framework to assess the industry's adaptation potential and policy development. The plan outlines flexible adaptation options and prioritization mechanisms to design suitable adaptation pathways, thereby strengthening the economic recovery capacity and resilience of Taiwan's fisheries sector.



• Project Research Report

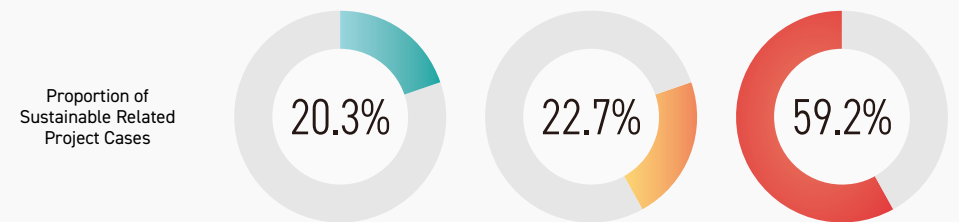
2023 Marine Pollution Incident Response Simulation Monitoring Project 14

This project establishes a 24-hour on-call team, utilizing internationally recognized oil spill simulation software (OILmap, CHEMmap, OILmap web) and a mobile marine oil pollution monitoring vehicle, to conduct marine pollution response simulations and provide decision support. This measure enhances our nation's capacity to respond to marine pollution and provides a crucial foundation for pollution control strategies.

In 2023, three actual and six hypothetical marine oil pollution simulation cases were completed. NOAA Web GNOME simulation reports were generated for fuel and lubricating oil. Chemical simulations were conducted for benzene and 1,2-dichloroethane, and response recommendations were written. To enhance the application of marine oil pollution dispersion modeling, four system operation training sessions were conducted, with 42 participants. Revised the operating manual and updated the instructional videos. The overall project results have been integrated into the 'Marine Environmental Management Platform' to provide scientific support and monitoring for response units.

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

Type	2023	2022	2021
Total Number of Government Project Contracts Undertaken	123	110	120
The Total Number of Projects Related to Sustainability	25	25	71



3.5.5 Marine Characteristic Research and Collaboration Plan

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

NKUST has developed key research areas focused on marine characteristics, cultivating new faculty to align marine scientific research with global trends in 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.

In the realm of faculty research, a project titled 'Practical Research on the Application of Unmanned Vessels for River Water Quality Testing' has been proposed. This initiative utilizes sensors to continuously monitor water hardness, pH, dissolved oxygen concentration, ammonia nitrogen concentration, conductivity, and salinity. Additionally, the project employs brain-inspired visual mapping to identify and track changes in water quality, facilitating effective control of river and ocean pollution and ensuring water safety. In 2023, the project published 44 papers in SSCI journals, generated 24 National Science and Technology Council (NSTC) projects (approximately NT\$26 million), and secured 6 industry-academia collaboration projects (approximately NT\$2.9 million), demonstrating significant achievements.



▲ Unmanned Vessels Conduct River Water Quality Testing

To encourage student exploration of marine issues, NKUST has approved funding for 10 student research projects with a marine focus. These projects will promote collaboration across campuses and departments. One student team responded to the government's marine conservation initiatives by proposing 'Local Guardians: Finding Homes for Ocean Waste.' They collaborated with a local junior high school in Penghu to hold marine conservation outreach activities, including lessons on marine waste and conservation, beach cleanup events, and waste repurposing. These efforts aimed to raise public awareness of marine conservation.

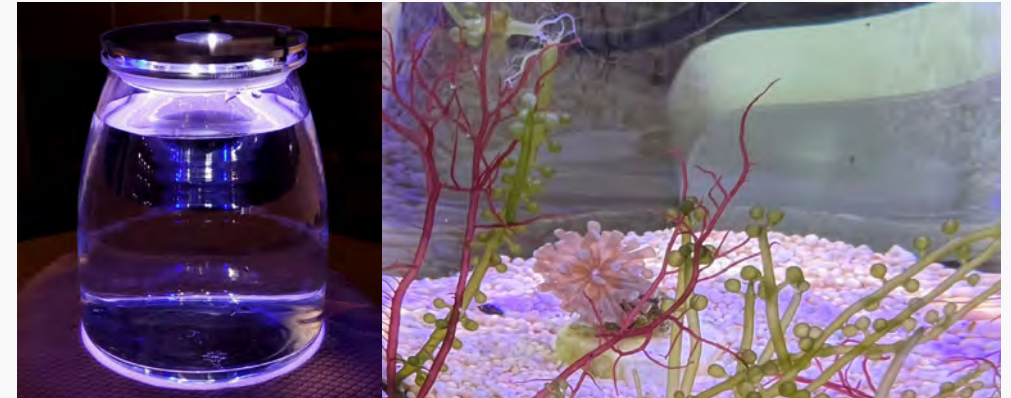


▲ 'Local Guardians: Finding Homes for Ocean Waste' Conservation Course and Beach Cleanup Activity

In fostering student teams and nurturing enterprises, we continue to promote the development of new products related to sustainability issues. For example, utilizing byproducts from the green algae industry to extract algal protein and peptides as food ingredients, while simultaneously achieving carbon capture through the algae cultivation process, realizes a circular economy for the algae industry chain. Furthermore, we apply by-product technology from aquatic products to pet food. For example, we extract collagen protein from fish scales and combine it with indigenous tea leaf extracts to develop a fish collagen and plant-based shampoo. Furthermore, we have collaborated with Ai Si Te Company Limited to develop intelligent eco-bottles. These products utilize low-energy components, resulting in annual electricity costs of less than NT\$30. They are also being applied in seawater science education materials for coral conservation education.

Promoting Ocean Sustainability: An Innovative Path Through Industry-Academia Collaboration

NKUST's Marine Science and Technology assists student teams and incubated businesses in refining their products. For example, Co-Creation Bioresources Company has refined its frozen fish scale pearls into ready-to-eat products that can be stored and transported at room temperature, meeting market demand. Furthermore, Eriel Food Biotechnology Co., Ltd. has successfully developed fish collagen soup dumplings, which retain the meat filling and broth while enhancing nutritional value. NKUST will continue to guide students and engage with businesses in focusing on sustainability issues, promoting marine sustainability education.



▲ Intelligent Seawater Microcosm - Abiotic State

▲ Intelligent Seawater Microcosm - Coral and Seagrass



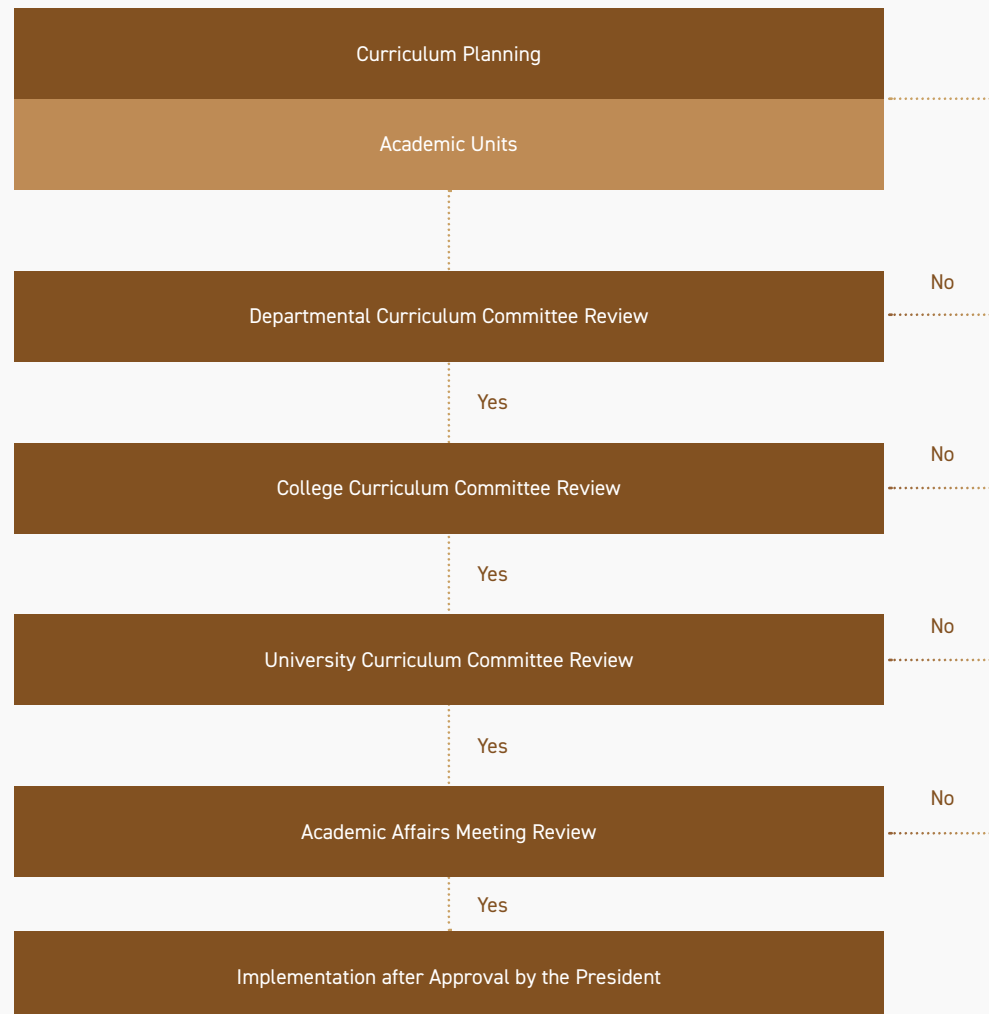
▲ Co-Creation Collagen Pearls

▲ Eriel Collagen Soup Dumplings



3.6 Teaching Quality Assurance

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.



In accordance with the 'Flexible Salary Incentive Measure for Outstanding Teaching, Counseling, and Service Personnel' of NKUST, this measure aims to reward and recognize faculty members who have actively cultivated excellence in teaching. It also seeks to inspire a passion for teaching among all faculty members. Starting from the 2022/2023 academic year, the measure would be calculated on an annual basis and would include a fixed incentive for teaching practice research projects. A total of 105 awards have been granted, benefiting 79 faculty members.

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 the projects and initiatives related to promoting teaching innovation and improvement:

Teacher Professional Community

A group of teachers with shared beliefs, visions, or goals, collaboratively engage in inquiry and problem-solving, continuously dedicated to enhancing students' learning outcomes. NKUST encourages teachers to establish four types of teacher communities: 'Teaching Growth,' 'Practical Knowledge and Skills,' 'Thematic Approach,' and 'Teaching First Aid Station.' Through regular meetings, sharing of teacher experiences, and collaborative activities, these communities foster interaction, exchange of experiences, and enhancement of practical teaching expertise among educators. Innovative teaching methods are employed to elevate teaching quality and improve student learning outcomes. An annual achievement exhibition serves as a platform for mutual learning and improvement. In 2023, a total of 30 projects were funded, resulting in the development of 32 interdisciplinary teaching materials or lesson plans, the design of 25 innovative teaching methods or instructional models, the proposal of 32 Ministry of Education teaching practice research program, and the facilitation of 82 student internships or job opportunities.

Innovative Teaching

NKUST has been implementing teaching innovation for many years. Starting from the 107-2 semester, an integrated promotion method has been introduced. The innovative teaching method at NKUST serves as a prelude to the internal support program for teachers applying for the Ministry of Education's teaching practice research program. It involves teachers using innovative teaching methods that integrate theory and practice to design creative course content, aimed at resolving various teaching challenges and enhancing students' interest, motivation, and learning effectiveness. A total of 70 project applications were submitted for the year 2023. Among these, 62 were approved and received funding, resulting in a pass rate of 89%.

Problem/Project-Based Learning (PBL)

NKUST values the core principles of higher education, namely 'autonomous learning' and 'critical thinking.' We encourage faculty to revitalize the learning environment through professional development workshops and faculty communities to enhance the quality of teaching. Over the years, the promotion of PBL courses has been a priority. In 2021, the scope of the grant program was expanded to integrate topic-oriented learning, aiming to foster innovative teaching practices and learner-centered pedagogical approaches. During the 2022-2023 academic year, a total of 58 applications were submitted, with 50 approved, resulting in an approval rate of 86.21%. Currently, 13.95% of faculty at NKUST have implemented PBL in their teaching. Following the completion of the subsidized courses, the Teaching Development Center arranges a presentation event and guides faculty members to submit educational research proposals to the Ministry of Education. This initiative aims to promote teaching reform and development.



Digital Educational Multimedia

In the first semester of 2022, NKUST initiated the course subsidy 'Integration of Digital Audiovisual Materials into the Curriculum' program for the first time. This initiative aims to empower teachers to understand the trend of digital learning and effectively utilize various online tools and teaching methods. Additionally, we offer a 20-hour annual training course on digital blended teaching, designed to assist teachers in building a foundation for enhancing their abilities. To date, 61 teachers have obtained certification from the training program and have become Empowered Blended Teaching Instructors. 'Integration of Digital Audiovisual Materials into the Curriculum' is an exclusive course subsidy tailored for 'Empowered Blended Teaching Instructors,' encouraging teachers to create 8 to 12-minute lightweight digital audiovisual materials to incorporate into traditional courses. This approach combines the concept of micro-learning, employing short-duration multimedia content, and employing synchronous and asynchronous online teaching strategies. By applying for three distinct categories of subsidies, teachers can adjust the pace of implementation, lowering the threshold for digital teaching. This initiative expands the array of digital teaching resources, fosters the remote learning abilities of both teachers and students, and advances hybrid teaching methods. As of 2023, 22 teachers have participated in this subsidy project.

MIAOPU Project

The MIAOPU Project integrates the 'Collaborative Curriculum Preparation and Cross-Disciplinary Instruction' model into regular and micro-credit courses through design thinking pedagogy. Prior to the start of the course, instructors engage in cross-disciplinary collaborative lesson planning to effectively integrate practical issues into instructional design. After the course, they share student learning outcomes, discuss teaching effectiveness, and explore the depth of learning. As of 2023, the project has conducted numerous teacher development workshops, XY-type training workshops, and international faculty exchanges. 9 teachers have obtained certification, and 2 are reserve coaches. The project aims to cultivate innovative education that aligns with industry needs through cross-disciplinary collaboration.

Teacher Instructional Consultation Service

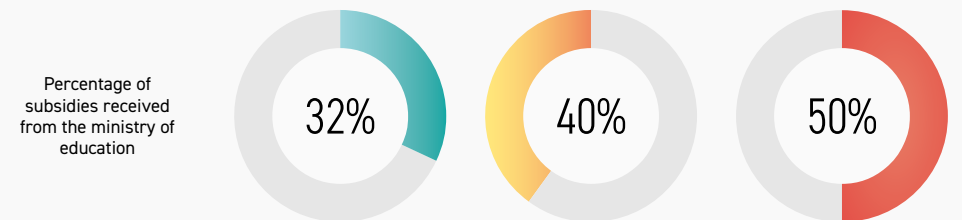
Since 2019, the Teaching Development Center has launched the 'Faculty Teaching Consultation Service' to support faculty members in overcoming teaching challenges and preparing for promotion. Services encompass six categories: teaching promotion, innovative teaching, teaching practice research, and others. They provide expert guidance to address teaching challenges and offer subsidies for consultation fees. As of 2023, a total of 13 consultation services have been conducted, receiving positive feedback from users who believe that these services have a significant impact on improving teaching quality.

Teaching Practice Enhancement Subsidy

To enhance teaching and improve its effectiveness, NKUST has initiated an internal teaching practice research enhancement subsidy, guiding teachers to align with the Ministry of Education's teaching practice research initiative. Since 2021, we've submitted 16 applications for enhancement projects, all of which were also submitted for the Ministry of Education's teaching practice research program, receiving subsidies for 8 projects. In 2022, we applied for 15 enhancement projects, all of which were also submitted for the Ministry of Education's teaching practice research program, receiving subsidies for 6 projects. In 2023, we applied for 22 enhancement projects, receiving subsidies for 7 projects.

▼ Teaching Practice Research Enhancement Subsidy in the Past Three Years

Item	Year		
	2023	2022	2021
Application for teaching practice research enhancement subsidy	22	15	16
Subsequent application for a teaching practice research program and received subsidies from the Ministry of Education	7	6	8



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. A total of 85 project proposals were submitted for the 2022/2023 academic year, of which 39 were approved, with an approval rate of 45.9%. Seven project leaders were honored with the distinction of Outstanding Project. NKUST ranked first in the nation for the number of Outstanding Projects awarded in the 2022/2023 academic year.

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

Item	Academic Year		
	2022	2021	2020
Number of applications	85	75	60
Number of approvals	39	44	25
Passing rate			
Highlights/Outstanding Achievements	7	5	5

Teaching Feedback Survey

NKUST places great importance on formative and process-oriented teaching feedback surveys, including mid-term and end-of-term assessments. The mid-term survey aims to encourage students to reflect on their learning process, understand their current situation and challenges, and enable teachers to adjust teaching content and methods accordingly. The end-of-term survey is used to evaluate the effectiveness of teachers' instruction and enhance the quality of teaching.

▼ Statistics of Teaching Feedback Survey in the Past 3 Years

	2022- Second Semester	2022- First Semester	2021- Second Semester	2021- First Semester	2020- Second Semester	2020- First Semester
Total Number of Courses	4,807	5,038	4,924	5,208	4,885	5,069
Average Satisfaction Score (out of 5)	4.5	4.5	4.5	4.5	4.5	4.4
Response Rate						

Teaching Evaluation and Accreditation

NKUST successfully passed the 2020/2021 Academic Year Technological University Institutional Evaluation Plan in June 2021. The evaluation results for all indicators, including Institutional Management and Development, Curriculum and Instruction, Student Learning Assurance and Effectiveness, and Institutional Management Performance, were deemed satisfactory. The College of Management and the College of Finance and Banking at NKUST achieved AACSB International accreditation in July 2019, ranking them among the top 5% of business schools worldwide.

▼ Announcement of Institutional Self-Evaluation Results for the 2020/2021 Academic Year

Time	Plan	School	School affairs evaluation results	
			Evaluation items	Evaluation results
110/06	Technological university school affairs evaluation	NKUST	1.School affairs management and development	Passed
			2.Curriculum and teaching	Passed
			3.Student learning assurance and effectiveness	Passed
			4.School affairs management performance and self-improvement	Passed

▼ AACSB International Accreditation for the College of Management



Furthermore, a total of five departments at NKUST passed the Institute of Engineering Education Taiwan (IEET) 2022/2023 Academic Year 'Engineering Education Accreditation' (EAC-Washington Accord) in January 2023. The list of departments is as follows:

NKUST	- Department of Civil Engineering - Department of Industrial Engineering and Management - Department of Chemical and Materials Engineering - Department of Mold and Die Engineering - Department of Mechanical Engineering	EAC
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- ▼ The Department of Mold Engineering at NKUST has successfully obtained accreditation from the Institute of Engineering Education Taiwan (IEET) Engineering Education Accreditation



3.7 Academic and Ethical Integrity

3.7.1 Academic Integrity

To equip students with essential ethical awareness and attitudes for research, our university has instituted 'Guidelines Governing Academic Research Ethics Education.' It mandates that graduate students fulfill specified courses at the Center for Taiwan Academic Research Ethics Education before they are eligible to sit for degree examinations. Furthermore, each department (college, institute, degree program) may craft relevant courses or alternative approaches to academic research ethics education in line with their distinct characteristics and requirements, as long as they align with the content of academic ethics education. In the past 3 years, our university has achieved a 100% pass rate in the statistics of academic ethics courses, as shown in the table below.

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

Unit: Number of Individuals

	2022/2023 Academic Year		2021/2022 Academic Year		2020/2021 Academic Year	
	Number of participants expected	Number of approvals	Number of participants expected	Number of approvals	Number of participants expected	Number of approvals
Master's student	1655	1655	1604	1604	1662	1662
Ph.D. student	84	84	68	68	50	50

To ensure that faculty, students, and researchers at NKUST possess the necessary ethical understanding and attitudes for conducting academic research, NKUST has established the 'National Kaohsiung University of Science and Technology Academic Ethics Regulations and Review Procedures.' These procedures provide an objective and fair process for addressing violations of academic ethics. Furthermore, NKUST regularly holds workshops on academic ethics. On November 20, 2023, a workshop titled 'Plagiarism, Duplicate Publication and ChatGPT' was conducted, with a total of 77 faculty members participating.

▼ Statistics on Teacher Ethics Cases in the Past Three Years

Year	Number of Cases	Closed	Open Cases	Remark
2023	9	5	4	Four open cases from 2022 will continue to be monitored through 2024
2022	0	0	0	
2021	6	6	0	

3.7.2 Ethical Integrity

In order to uphold the principles of integrity, fairness, and the rule of law, our university adheres to the 'Ethical 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. Furthermore, 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 office continues to promote a culture of integrity, strengthening its commitment to academic ethics and clean governance. In 2023, the office organized a lecture titled 'Service Integrity Ethics from the Perspective of Legal Administration.'

3.8 Career Counseling and Performance of Graduates

3.8.1 Career Exploration and Counseling



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

Organizing a variety of career courses and employment matching activities, including career lectures, recruitment briefings, company visits, and campus job fairs, providing students with comprehensive career planning assistance.

1. Career Lecture: Through reliable career assessments (such as PPSS, UCAN, and CPAS), we guide students in completing 'self-exploration,' helping them gain a deeper understanding of their interests, strengths, and suitable career paths. Career lectures serve as a gateway for students to explore various industries, offering services such as resume writing, interview skills training, and personal career exploration and consultation. In 2023, a total of 33 sessions were held, with 960 participants, helping each student prepare for their future careers.



▲ 2023 Career Lecture: 'Ghost Island Sounds Podcast: Unveiling the World of Voice Broadcasting Careers'

2. **Job Recruitment Information Seminar:** Encouraging a diverse range of companies to campus for recruitment presentations, providing students with a broader spectrum of corporate information and job opportunities. In 2023, 24 information sessions were held, providing students with a deeper understanding of various corporate cultures and related employment opportunities. Consequently, students' interest in recruitment information has shown a gradual rise.



▲ 2023 TSMC Semiconductor Trends Lecture and Internship Briefing Session



▲ 2023 TSMC Internship Briefing Session

3. **Corporate Visits:** Actively expanding collaborations with renowned companies to offer students opportunities to gain direct insights into corporate operations and culture. Through firsthand experience of a company's inner workings and interaction with industry professionals, 15 site visits were conducted in 2023, with 789 participants, gaining deeper insights into the industry's characteristics and challenges.



▲ 2023 Kaohsiung Rapid Transit Corporation Visit

4. **Campus Job Fair:** Every year from March to June is the graduation season for universities. In 2023, NKUST held both physical and online job fairs across its four campuses. The physical exhibition attracted 186 participating organizations, while the online exhibition garnered 16,579 views. These activities provide students with opportunities to interact directly with businesses, allowing them to gain a better understanding of corporate hiring needs and management styles, and enabling them to submit resumes.



▲ 2023 Campus Job Fair

▼ Career Activities Implementation Status in the Past Three Years

Years	Item	Career Lecture	Job Recruitment Information Seminar	Corporate Visits	Campus Employment Expo
2023	Session	33	24	15	5
	Number of visitors	960	2201	789	15,619
2022	Session	41	36	8	5
	Number of visitors	1,220	2,262	226	12,073
2021	Session	59	18	7	3
	Number of visitors	1,596	1,810	291	8,889

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

Enhancing students' practical professional abilities, aligning with the curriculum plans of each department, we offer semester internships, academic year internships, summer/winter internships, and project-based internship courses. Through workplace internship, students have the opportunity to apply theoretical knowledge in practical scenarios, gaining workplace experience in fields such as manufacturing, tourism, transportation, and finance. In the 2022/2023 academic year, a total of 1,763 students participated in internship courses, with 590 cooperating internship institutions.

▼ Number of Internships in the Past Three Academic Years

Academic Year	Internship	Academic Internship	Summer (Winter) Internships	Internship Project	Total
2022	667	285	626	185	1,763
2021	618	224	694	156	1,692
2020	558	140	365	210	1,273

1. Invitation for Corporate Internship Promotion: On-site visits were conducted to develop internship partner organizations, ensuring that these partners provide occupational safety and health protection, legal labor benefits, and quality internship guidance during the internship process. Partner companies were invited to conduct internship briefings and interviews on campus. In 2023, a total of 37 corporate internship briefings and 8 on-campus corporate internship interviews were held, connecting students with opportunities to discover their potential and career interests as they embark on their internship journey.



▲ 2023 Getac Group Internship Visit and Exchange

▲ 2023 Siemens Gamesa Internship Visit

2. Jobflix Summer Enhancement Online Event: Summer learning never stops, enhancing students' summer career exploration and pave the way for their future. During the summer, the event invited YouTubers and Instagrammers to host a series of online lectures titled 'JOBflix 2 | Cross-Disciplinary Careers x International Workplaces x Internship Empowerment.' These lectures covered topics such as overseas workplace life, international resume strategies, and essential skills for engineers, totaling 12 online seminars. The event attracted approximately 700 participants.



▲ JOBflix 2 Online Seminar: Overseas Workplace Life

3. Senior Internship Freshmen Experience Sharing Event: The 'Workplace Internship Experience Creative Contest' was organized to encourage students to share their internship experiences and reflections through videos or images. In 2023, 12 students received awards for sharing their internship experiences from various industries, including shipping, hospitality, food, information technology, and manufacturing. Furthermore, the 'Intern Life Snapshots' event received 334 submissions. Through photos and personal reflections, interns shared their experiences, giving students a closer look at the realities of the workplace and fostering a sense of accomplishment and growth.



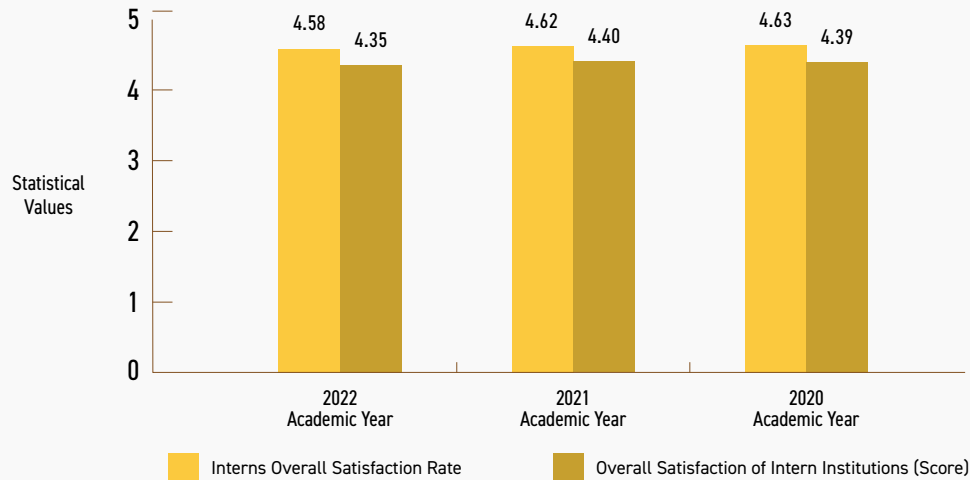
▲ 2023 Workplace Internship Experience Creative Contest Award Ceremony



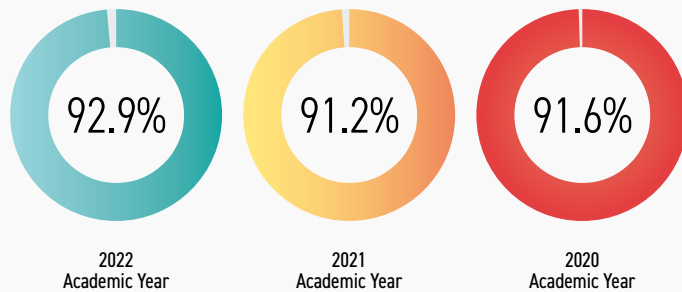
▲ Intern Life Snapshots

4. Satisfaction Survey of Interns and Internship Institutions: According to the analysis results from the 2022 academic year satisfaction survey for internship students and institutions, the overall satisfaction of students participating in internship courses was rated at 4.58 out of 5, and the overall satisfaction of internship organizations with the intern students was rated at 4.35 out of 5. Additionally, in the same academic year, 92.9% of internship organizations expressed willingness to retain their interns, while 96.4% indicated they would continue to offer internship opportunities. This illustrates the excellent performance of NKUST's intern students, who have garnered strong recognition from the industry.

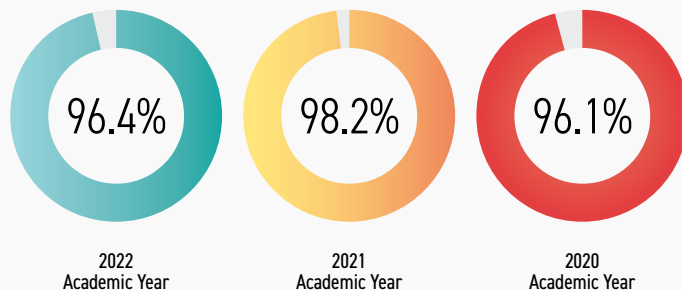
▼ Satisfaction Survey of Interns and Internship Institutions for the Past Three Academic Years



Retention rate of internship organizations for interns



Retention rate of internship positions offered by organizations



3.8.2 Employment Performance of Graduates

1. Graduate Destination Tracking Survey:

NKUST conducts a graduate destination tracking survey to gain insights into the career development and learning paths of alumni, and to establish a long-term alumni database. The survey indicates that the survey rate for graduates exceeds 80% one year after graduation, 68% after three years, and 60% after five years. In terms of employment rates, one year after graduation, it reached 93.90%; three years later, it reached 95.92%; and five years later, it reached 95.54%. This demonstrates the high employment rates of alumni across various surveys.

2. Employer Satisfaction Survey:

To understand the performance of graduates in the workplace, our institution conducted a 'Survey on Employer Evaluation of Graduate Workplace Abilities.' This survey aimed to assess the performance of graduates in their professional roles. The survey included twelve competencies including professional expertise, innovative thinking, information technology application, willingness to learn, adaptability, problem-solving skills, resilience, work responsibility, global perspective, foreign language proficiency, teamwork, interpersonal interaction, and communication skills. In 2023, the average satisfaction score from employers regarding graduates was above 4 out of 5. The highest score of 4.32 was given for 'strong willingness to learn and high adaptability,' demonstrating that company executives highly value the competencies of NKUST's graduates.



- The graduation rate of our school in 2023 is **89.2%**, and the graduation rate for the current year is **85.5%**.
- The employment rates of our university's 2023 graduates after 1, 3, and 5 years of graduation all exceed **93%**.
- The overall workplace performance of our university's graduates in 2023 has reached a score of **4.27** out of 5, according to feedback from employers.



04.

Social Inclusion and Practice

4.1	University Social Responsibility	74
4.2	International Exchange	76
4.3	Resource Sharing	78
4.4	Barrier-free Campus	81
4.5	University Historical Buildings and Open Space	81





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.



4.1.1 Project Positioning

▼ University Social Responsibility Program

With a mission of 'Local Connection' and 'Talent Cultivation,' we committed to leveraging marine expertise, fostering an innovative entrepreneurial spirit, and enhancing applied skills to support regional industrial clusters and community development. Through the University Social Responsibility Implementation Program promoted by the Ministry of Education, NKUST has successfully secured a total of 18 projects, receiving subsidies of NT\$240 million. This achievement places NKUST at the forefront among all public and private universities nationwide. Additionally, NKUST has established the USR HUB, a base for social responsibility initiatives, which supports 23 micro-USR student teams with over NT\$15 million in subsidies. This underscores NKUST's commitment and capability in fulfilling its social responsibility and advancing sustainable development.

▼ University Social Responsibility Hub (USR HUB)

Since 2017, NKUST has implemented the 'Regulations Governing Subsidies for University Social Responsibility Pilot Projects,' encouraging faculty and students to actively engage in exchanges with local communities and industries while compiling key issues in regional development. By mentoring on-campus micro-USR student teams, our university encourages their engagement in social responsibility practices. The USR HUB team also facilitates the integration of these achievements into other initiatives, such as the Ministry of Education's USR program and industry-academia collaborations. This mentoring and guidance approach directs students to connect their professional skills with local sustainability issues, thereby promoting regional development.

To enhance the richness of curriculum development and effectively align with the USR strategy, NKUST is committed to diversifying curriculum development. In support of the USR strategy, we implement a range of initiatives to encourage student and faculty participation. Over the past three years, USR has approved 45 applications for faculty course support programs, resulting in 14 awards for achievements. The total amount of subsidies and awards received is NT\$9.23 million. The Social Responsibility Credit Program aims to cultivate USR talent with storytelling and practical skills across four key areas: creative arts, social enterprises, environment, and multimedia.

NKUST offers a variety of micro-credit courses, such as Construction Engineering Practice, Low-Carbon Living, and Environmental Management, to enhance students' practical learning quality. Simultaneously, we implement the Digital Technology Microprogram to foster interdisciplinary academic exchange. Future plans include expanding collaborations across departments and disciplines in microprogram development. Through new curriculum design, such as the Coastal Local Revitalization Credit Program and the New Agriculture Revitalization College, the institution integrates SDGs teaching principles, connecting education, research, and industry, fostering sustainable development and social transformation, providing knowledge and skills with promising future prospects.

University Social Responsibility (USR) Program Subsidies

Project Name	Execution Issues	Execution Site	SDGs	Subsidy per Year
You Can Do It! Kaohsiung Mountain and Urban Core Sustainability Blueprint	Local Care Cultural Sustainability	Meinong, Landscape Conservation Axis (Namasha)	1 11 4 11 13	8 million
Coastal Placemaking and Social Innovation—Kaohsiung Fishing Village Project	Local Care	Yong'an and Mituo	2 11 12 14	7.5 million
Carbon-Free Ideal, Net-Zero Bridge Nan	Sustainable Environment	Ciaotou and Nanzih	11 12 13	6.8 million
Bamboo Dream Learning + Active Leisure in Garden Fields	Local Care Popular Science Education	Zhutian	8 9 11	2.5 million
Good Fish Next Door Project	Industry Linkage	Linbian	7 12 14	8 million

University Social Responsibility Hub (USR HUB) Subsidies

Project Name	Execution Issues	SDGs	Subsidy per Year
【New Project】Green Xiaolin: Revitalizing the Taivoan Culture	Cultural Sustainability	11	400 thousand
【New Project】Alishan Railway Tourism Development - Rooted and Co-existing with Local Culture in Luku	Cultural Sustainability	11	400 thousand
【Continuation Project】Dancing in the New Garden: Linking Talent in the Kaohsiung-Pingtung Aquatic Industry Project	Industry Linkage	8	500 thousand
【Continuation Project】Haishan Youth - Digital Learning Partner Instruction and Camp	Local Care	4	400 thousand
【Continuation Project】Participatory Social Design Practice: Xiao Liuqi Environmental Education	Sustainable Environment	11	500 thousand

4.1.2 Representative Case Illustration

▼ You Can Do It! Kaohsiung Mountain and Urban Core Sustainability Blueprint



▲ The 'volunteer construction' team created the 'Sustainable Na-House' for Minsheng Elementary School

The volunteer construction team of the Department of Construction at NKUST has executed the Ministry of Education's USR project 'U Can Do It! Kaohsiung Mountain and Urban Core Sustainability Blueprint,' completing this year's volunteer construction initiative. The team has integrated the traditional housing culture of the Kanakanavu tribe, an indigenous group in Kaohsiung's Namasha District, to preserve and promote the building design spirit of their traditional homes. They have delivered the 'Sustainable Na-House' to Minsheng Elementary School in Namasha District, which will serve as an immersive cultural learning space for the tribal students in the future. Yen Hao-l, Principal of Minsheng Elementary School in the Namasha District of Kaohsiung City, noted that the indigenous tribe in this area is the Kanakanavu, with a population of over 400. The handover ceremony featured a performance by the kindergarten children of Minsheng Elementary, who sang songs in the Kanakanavu language, and included a joint chorus with tribal elders, effectively promoting and preserving the indigenous cultural heritage. During the design phase of 'Sustainable Na-House,' extensive communication took place with local elders. The structure features elements such as wooden fences, bamboo wall panels, and A-shaped columns. Local elders guided students into the mountains to gather 'yellow rattan,' a traditional material used in ancestral homes. This rattan was utilized to bind and secure various components. The elders also provided hands-on demonstrations of the techniques for processing and binding the yellow rattan, which have been integrated into 'Sustainable Na-House.' This space is set to become an essential learning environment for students in the future. The 'volunteer construction team' has journeyed to remote villages in Tainan, Kaohsiung, and Taitung, among other areas. Tailoring their efforts to the traditional culture and community needs of each village, the team has built exquisite small-scale ecological projects and traditional structures, which are then handed over to the local communities. This initiative reflects the United Nations' SDGs aimed at fostering cultural sustainability.



▼ Carbon-Free Ideal, Net-Zero Bridge Nan



▲ Stream Conservation and Water Resource Qualified Teacher Training Workshop

In recent years, the impact of climate change has led to frequent water shortages in southern Taiwan, as typhoons have become less frequent. The number of typhoons over the past decade has significantly decreased compared to earlier years. Additionally, Taiwan's tendency for concentrated rainfall and uneven distribution of water resources has heightened the risks associated with water scarcity. Therefore, the USR project 'Carbon-Free Ideal, Net-Zero Bridge Nan' from the Department of Safety, Health and Environmental Engineering at NKUST, in partnership with Fubon Life Insurance, has brought together the university, businesses, and the local community to collectively protect the water environment. Participants included students, local residents, individuals interested in water resource issues, and corporate volunteers from Fubon Life Insurance, representing a diverse age range from young to old, with nearly 150 participants in total. Together, they have taken action to safeguard water resources, continuously enhancing public awareness of environmental sustainability, and embodying the spirit of USR x ESG in industry-academia collaboration to protect Taiwan's environment. Beginning in May of this year, we have been collaborating on the 'Hand in Hand with the Creek, Deeply Rooted in the Local Community' project. Through the 'Creek Journey' and 'Guardians of the Creek' activities, we aim to promote environmental education, starting with scientific concepts and linking them to our living environment and water resources. This initiative seeks to enhance awareness and appreciation for rivers, ultimately inspiring practical actions to support the love of water.

▼ Good Fish Next Door Project



▲ This report details our university's USR project, 'Neighborhood Good Fishing,' which recently participated in the Tokyo International Seafood and Technology Expo in Japan.

▲ The 'Good Fish Next Door Project' hosted the 'Towards International Common Goods - Regional Caring Practice Competition'

This project, part of the Ministry of Education's USR Program—International Linkage Project 'Good Fish Next Door,' is deeply rooted in Linpien, Pingtung County. It adopts a comprehensive approach to revitalizing the local community, covering everything from the development of aquaculture technology to the promotion of fishery education, and ultimately to packaging and marketing. This project not only implements a comprehensive revitalization plan that integrates the community, industry, production, and sales, but also actively collaborates with Japanese partners to exchange experiences in local revitalization and regeneration. In collaboration with the Pingtung County Government, NKUST showcased Pingtung aquatic products, including grouper, threadfin bream, and sea bass, at the Japan International Seafood & Technology Expo. Additionally, NKUST showcased a collagen protein beverage developed from fish scales, a by-product of seafood processing. This product aims to create a high-quality export market for Taiwan's aquaculture products, highlighting Taiwan's excellence in aquaculture and processing technology.

Additionally, this project hosted the 'Towards International Common Goods - Regional Caring Practice Competition,' inviting alumni who have been dedicated to local community development and innovation in distinctive industries to participate. The competition specifically invited student teams from partner universities in Taiwan and Japan, including Kochi University, to participate across the Taiwan Strait. These teams were tasked with developing creative and practical solutions to rural challenges, promoting the development of local industries. Foxconn Group's subsidiary, Cloud Network Technology Singapore Pte., Ltd., actively sponsored and showcased its corporate social responsibility initiatives in support of this competition. This demonstrated the company's commitment to promoting social well-being and global collaboration.

4.2 International Exchange

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.

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, a one-month 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 of International Exchange in 2023

Unit: Number of Individuals

Categories of International Exchange	2023	2022	2021
Exchange students (outbound)	119	42	10 (6 physical, 4 online)
Exchange students (inbound)	22	3	1 (physical)
NKUST students going-abroad	567	195	188 (online)
NKUST Faculty Going-abroad	697	19	29 (1 physical, 28 online)
Double degree program (outbound)	22	18	6 (3 physical, 3 online)
Double degree program (inbound)	2	1	25 (22 physical, 3 online)
Overseas students visit	75	197	0
Overseas scholars visit	52	12	42 (online)

²⁴ NKUST students going-abroad includes English Wings Training Camp, short-term camps, seminars, competitions, international experiential learning, international volunteer, overseas internships.

1 Exchange Students and Double Degree Programs

(Outbound and Inbound)

1 Study Abroad

In 2023, 119 students participated in overseas exchange programs, and 22 students participated in double degree program studying abroad. Germany and Japan were the main countries for exchange and training programs, while the United States was the primary country for double degree programs. The member schools of the HAWtech-TAltech serve as the primary destinations for exchange students. Close academic exchanges help cultivate talent with an international perspective and knowledge of European industries. In 2023, students also chose to study abroad in countries such as Thailand and the Czech Republic. Additionally, for the first time, students successfully applied to Toyo University in Japan through the University Mobility in Asia and the Pacific (UMAP), offering a broader range of study abroad opportunities.

2 Incoming Exchange Students

In 2023, NKUST welcomed 22 exchange students and 2 double degree program students, primarily from China and Austria. The majority of incoming exchange students are from the College of Management. Among them, two Austrian students are enrolled in the International Management Program at NKUST through a double degree agreement.



2023 SOAR Study Abroad Summer Overseas English Camp

2 Short-term Study Abroad Program for NKUST Students

To stimulate students' motivation for international learning, NKUST organizes international education exhibitions, lectures, and establishes incentive programs, offering a variety of opportunities for exchange, including study abroad programs, double degree programs, short-term study programs, overseas English camps, and international volunteer opportunities. Following the complete reopening of borders after the COVID-19 pandemic, the number of students studying abroad has increased significantly. In 2023, a total of 360 students from NKUST participated in programs aimed at enhancing international mobility, and 207 students took part in overseas internships.

1 Overseas internships

NKUST's overseas internship programs includes various internship opportunities in different areas. From 2018 to 2023, a total of 711 students have completed their internships. The main internship countries are Germany, Japan, and Southeast Asian countries.

2 Short-term study abroad camps

In 2023, a total of 113 students from our university participated in short-term camps at partner schools, including the Winter Camp at MCI Management Center Innsbruck - The Entrepreneurial School in Austria and the Global PBL program at Fukuoka Institute of Technology in Japan, enhancing international exchange. Furthermore, students participated in sustainable development related activities, such as the Cycling Around Shikoku Project of Ehime University in Japan. Additionally, 55 students participated in overseas seminars and competitions.

3 Soar camp

NKUST has been organizing the SOAR Study Abroad Summer Overseas English Camp since 2017, and the total number of participants has reached 559 people. Due to the pandemic, the program was shifted to domestic operations. In 2023, it resumed overseas study, collaborating with the Batangas Campus of Lyceum of the Philippines University, Ateneo de Manila University, and FEU Institute of Technology. A total of 146 students participated.





4 International volunteers

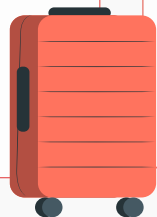
NKUST hopes that students will cultivate a passion for social service during their university years, inspiring responsibility through international volunteer services to fulfill their obligations as global citizens, and achieving the Sustainable Development Goals (SDGs). In 2023, a total of 35 students participated in 4 international volunteer activities, which included multicultural service camps in Indonesia, Cambodia, Thailand, and the Philippines. The students also collaborated with partner school Asia-Europe University to conduct 2 volunteer camps at a rural elementary school in Phnom Penh, Cambodia. Additionally, they participated in the Otaru Snow Light Path volunteer service team in Japan and served as snack volunteers at a domestic orphanage.



2023 International volunteer camp

5 International Experiential Learning

Since the 2017/2018 academic year, NKUST has implemented an International Experiential Learning program that integrates with general education courses, focusing on sustainable development in urban and rural areas of Asian countries. The program aims to guide students in independently planning international experiential learning opportunities, providing them with the chance to participate in programs in Asian countries. Since the program's inception, nearly 150 students have completed their study abroad experiences. 11 students participating in the 2023-2024 academic year program undertook international experiential projects, including 'Loving You More and More,' 'Returning to the Roots of Pu,' 'Architectural Characteristics of Mazu Temples in Malaysia and Taiwan,' 'Dear My Dearest Friend,' and 'Reborn, Circular Economy Arts Come Alive.'



3 Overseas Students Visits/ Short-term Exchanges

In order to facilitate campus internationalization, NKUST promotes the organization of international camps that combine the characteristics of departments, integrating the camp courses with expertise fields and incorporating cultural experience activities. In addition to providing foreign students with diverse training channels for academic enrichment, it also provides an opportunity for domestic students to engage in dialogue with foreign students from various countries, expanding their international perspectives through cross-cultural exchanges. In 2023, following the COVID-19 pandemic, the school actively resumed collaboration with its partner schools, organizing a total of two international camps with 75 student participants.

4 NKUST faculty going-abroad

NKUST promotes the internationalization of research outcomes by encouraging faculty and students to participate in internationally accredited lectures, organize and attend international seminars, and submit articles to international journals. These efforts aim to enhance teaching and research collaboration while increasing international visibility. In 2023, a total of 697 faculty members received subsidies to travel abroad for professional development, research, lecturing, visits, and attending academic conferences. Additionally, two faculty members led a delegation to participate in the Robot Forum at the University of Würzburg in Germany.

5 Overseas scholars visit

Subsidies are provided for departments to invite foreign scholars to Taiwan to deliver lectures, present papers, exchange research, conduct short-term teaching, and engage in teaching collaborations; and set up themed micro-credit courses and special lectures, so that students without study abroad experience can also experience internationalized learning model. Through diverse cooperation models, the program aims to deepen partner school relationships and enhance the school's international visibility. In 2023, subsidy was provided to 22 departments to invite a total of 52 foreign scholars.

6 International Buddy Management and Training

NKUST recruited and trained a total of 30 international buddies in 2023 to assist newly arrived overseas students in adapting to schoolwork and provide life adaptation consultation after arriving in Taiwan, so as to help overseas students integrate into life in Taiwan as soon as possible.



4.3 Resource Sharing

4.3.1 Library Resources

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.

Furthermore, NKUST's 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.

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.



▼ Statistics of Collection of NKUST's Library

Unit: Book

Resource Type	Chinese	Foreign Language	Total
Printed books	670,890	171,556	842,446
E-books	156,314	1,075,533	1,231,847
Print journals	4,369	3,100	7,469
Bound journals	68,871	45,805	114,676
Electronic journals	10,713	40,633	51,346
Database	201	227	428
Non-book materials	68,207	16,161	84,368

4.3.2 Artistic and Cultural-related Activities

NKUST's Arts Center enhances its visual arts, music, and theater facilities across all campuses to better meet the needs of faculty, students, and the community. The Center organizes exhibitions, concerts, theatrical performances, lectures, and workshops to promote the integration of art and technology, fostering academic exchange and cross-disciplinary dialogue. On-campus installation art enhances the campus's aesthetic appeal, transforming it into a relaxing space for faculty, students, and the public. It fosters students' creative thinking and problem-solving abilities, preparing them for the challenges of future society.



▲ 2023 Let's Art in NKUST exhibitions:
'Wander Land - Exhibition of Photography'

Yang Ching-Yu, President of NKUST shared with the exhibition guests the renovation process of the exhibition space at the Arts Center on the Jiangong Campus

Encourage Young Artistic Creation and Serve As An Art Incubation Hub

Since 2019, NKUST has been holding collection competition for young artists to submit their works every year. In 2023, this event entered its fifth year, establishing itself as a prominent visual arts competition for young Taiwanese artists and a platform for emerging talents to showcase their work. Under the scrutiny of a judging panel composed of art critics and academic experts, the competition has also uncovered numerous outstanding works that embody the spirit of the young generation of artists in the Young Artist Award era.

The 2023 event marked its fifth year, establishing itself as an important platform for young Taiwanese artists. A total of 853 works were submitted this year, including pieces by many renowned artists. The competition imposed no category restrictions, highlighting the emerging potential of contemporary cross-disciplinary creation. The award-winning works are highly experimental, encompassing oil painting, gouache, ink wash, mixed media, printmaking, and various sculptural materials. After an intense selection process, 42 works ultimately stood out, showcasing the creative talent of young artists. Over the past five years, more than 2,500 submissions have been received.



▲ Former president Wu Chien-Kuo (left) and a guest from our Japanese partner school (right) admire the archived works from the 2023 Fifth Young Artist Award



Thematic Art Extravaganza: A Profound Exploration of Art

The 2023 NKUST Arts Festival has officially launched, aimed at enriching students' arts and cultural activities and enhancing the artistic environment and educational framework. The program encompasses the development of Western art history from the Renaissance to the present, allowing students to transcend time and space as they explore artistic works from diverse styles and cultural backgrounds, deepening their understanding of art's evolution and development. Through a systematic thematic approach, students cultivate critical thinking and creative skills while enhancing their abilities to evaluate, compare, and appreciate artistic works, promoting humanistic arts education, and nurturing future talent with both technological and humanistic qualities.

The 2023 NKUST Arts Festival, themed 'Unparalleled Splendor: Baroque Art,' delved into the aesthetics of the Baroque period. Through lectures, performances, and various artistic expressions, the festival showcased the visual, musical, architectural, theatrical, and fashion styles of this era. In 2024, the festival will explore 'Neoclassical, Romantic, Impressionist, and Post-Impressionist (including Picasso and early 20th-century pre-Modern Art),' while 2025 will focus on 'the latter half of Modern Art and Contemporary Art.' The 2026 academic year will revisit 'the Renaissance,' creating a four-year cycle of artistic themes. This approach will allow each student to fully experience the richness of these four significant artistic periods during their university years.



▲ The 2023 Arts Festival at NKUST kicked off with a performance by the 'Essential Sound Baroque Ensemble,' titled 'Ancient Elegance and Splendor: A Journey Through the Baroque'



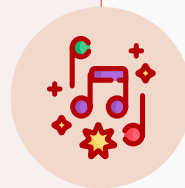
Opening a New Chapter for NKUST Through Art: Striving to Become a Model University for International Vocational Education

NKUST has long been dedicated to promoting arts and culture education, fostering diverse international exchanges and collaborations, and recognizing exceptional contributions to academic, cultural, and professional fields. We are committed to expanding our presence on the international stage. Through artistic performances, we enrich campus life, broaden exchanges among industry, government, and academia, and steadfastly cultivate the humanistic and artistic literacy of faculty and students at NKUST.

Under the theme of 'Joining Hands to Connect with the World and Building a Southbound Base,' we cultivate students' creativity and competitiveness for global mobility. The school anniversary celebration concert is one of our significant achievements. In 2023, we collaborated with our esteemed alumnus, Yu Neng-Sheng, known throughout Europe. We invited internationally acclaimed vocalists Maria Pia PISCITELLI, Ricardo TAMURA, Hector SANDOVAL, and Maria KUBLASHVILI to perform in Taiwan. They joined forces with the Evergreen Symphony Orchestra, and the concert attracted nearly 3,000 attendees, showcasing our outstanding achievements in cultivating technological talent.



▲ The 6th school anniversary celebration concert, coinciding with the 60th Anniversary of Kaohsiung Institute of Technology, titled 'Glory 60 Century Classics,' drew an audience of over 1,000 attendees in a single session



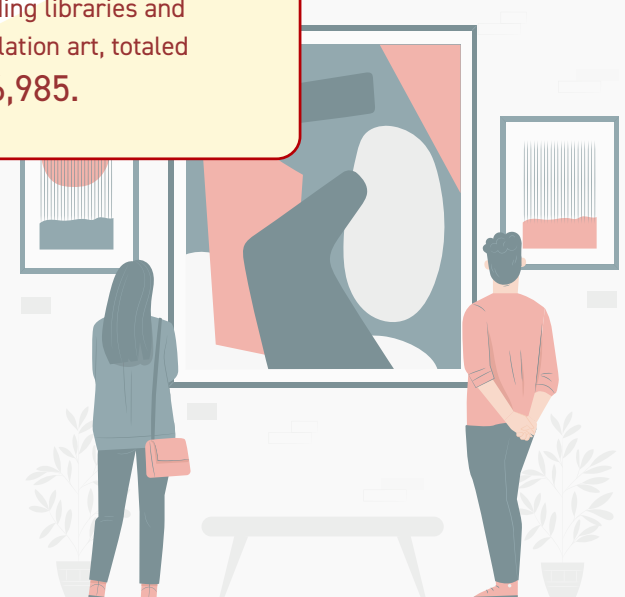
▼ NKUST's Investment in Expenditures Related to Arts and Culture

Unit: NT\$

Expenditures Related to Arts and Culture	Relevant Parties	Expenditure Amount
Arts and Culture Expenditures	College of General Education	70,152,909
Expenditures Related to the Library	Library	1,519,049
Campus Installation Art	General Affairs Department	4,585,027
Total		76,256,985



Expenditures related to the arts in 2023, including libraries and campus installation art, totaled NT\$76,256,985.



4.4 Barrier-free Campus

NKUST has designed all newly constructed buildings to include accessibility features, in accordance with the latest regulations. However, some existing buildings are over 20 or 30 years old, and certain facilities do not meet current standards. To avoid affecting the allocation of school funds, we have adopted a phased improvement approach, budgeting for upgrades annually. Since 2007, NKUST has invested NT\$77.76 million (including NT\$31.17 million in subsidies from the Ministry of Education) to enhance accessibility, completing improvements to 74 facilities.

In 2023, NKUST invested NT\$21 million to complete environmental improvements to restrooms (including accessible restrooms) in the Jiangong Campus, Nanzih Campus, and the First Campus. In 2024, NT\$8.99 million will be allocated for barrier-free facilities improvements at the Jiangong and Yanchao Campuses. Additionally, NT\$19.2 million will be allocated for restroom renovations (including accessible restrooms) at the Jiangong, Nanzih, and First Campuses. These facility upgrades aim to create a safe and inclusive environment for all. Barrier-free facilities (equipment) have been gradually improved or added, providing convenient access and daily use for faculty and students. In addition to creating a complete learning environment and living space on campus, these facilities assist students with disabilities in meeting their learning needs. They also consider individual privacy and the needs of diverse gender spaces. Barrier-free facilities maps of each campus are available for reference on the school website homepage.

Barrier-free facilities maps of Jiangong Campus at NKUST



Barrier-free facilities maps of each campus



A total of
NT\$ 21 million
was invested to improve NKUST's
barrier-free environment in 2023.

4.5 University Historical Buildings and Open Space

4.5.1 Preservation and Revitalization of University Historical Buildings

The 'North Lecture Building of Former Kaohsiung Institute of Technology' in NKUST's Jiangong Campus was constructed in 1965. It was the first campus of Kaohsiung Institute of Technology and had significant historical and cultural value. This building features reversed beams and cantilever plates, which create a light exterior facade that was uncommon at the time. The design showcases a distinctive stylistic feature characteristic of that era. It was officially designated as a historical building by the Kaohsiung City Government on March 8, 2021.

The North Lecture Building is one of the representative works of Taiwanese post-war modernism female architect Xiu, Zelan. This three-story reinforced concrete building is notable for its modular column and beam structure, reversed beams and cantilever plates, and semi-circular spiral staircase, exhibiting a distinctive style of its era. Furthermore, the W-shaped canopy at the main entrance is also one of its distinctive features. Xiu, Zelan's early architectural works in Kaohsiung include the main gate of National Kaohsiung Normal University, Kaohsiung Bank of Communications, the administrative building and library of Kaohsiung Institute of Technology, among other works. However, most of them had been demolished. Only the North Lecture Building and the library of Kaohsiung Girls' Senior High School remain. Its cultural heritage value is summarized as follows:

- 1 The architectural layout reflects the establishment history of Kaohsiung Institute of Technology and lays the foundation for its campus space use zoning, core shaping, and campus axis formation in its campus space.
- 2 It is one of the few remaining works in Kaohsiung by Xiu, Zelan, who is known as the 'first female architect of Taiwan'.
- 3 In terms of architectural style, the use of reversed beams and cantilever plates forms a light exterior facade elevation. The elegant style of W-shaped porch with folding panels and semi-circular spiral staircase adds a soft and graceful image to the appearance. These expressive and decorative features are a testimony to the architectural style of architect Xiu, Zelan.
- 4 The construction method of reinforced concrete with brick and folding panel design preserves the characteristics of post-war educational architecture in the 1950s and 1960s.

Kaohsiung Institute of Technology was the oldest technology institute in Kaohsiung City and a renowned institution of higher learning in Southern Taiwan. The North Lecture Building, which was the first campus building after its establishment, holds a significant place in the history of vocational education in Kaohsiung. It is also a collective memory for generations of faculty, students, and citizens.

To promote the spatial activation and utilization of the campus building of the North Lecture Building, we have an initial plan to transform it into a University History Museum and an art and cultural exhibition venue. We will preserve its simple original appearance while imbuing it with new functions. In accordance with the Cultural Heritage Preservation Act, we have completed the necessary investigations, research, and restoration and reuse projects. These projects were approved in May 2023. We are currently in the process of restoration, with the project expected to be completed by 2025, at which point the site will be open to the public.



▲ North porch, corridor, and W-shaped folding panel canopy



▲ Semi-circular spiral staircase on the south elevation

On December 1, 2023, NKUST set up a temporary historical exhibition within the construction fence surrounding the North Lecture Building restoration and reuse project. The exhibition featured static display panels along with interactive games, highlighting the historical architectural features of NKUST and the concepts behind its revitalization and reuse.



▲ Temporary Exhibition Area for the North Lecture Building Restoration and Reuse Project Enclosure Wall



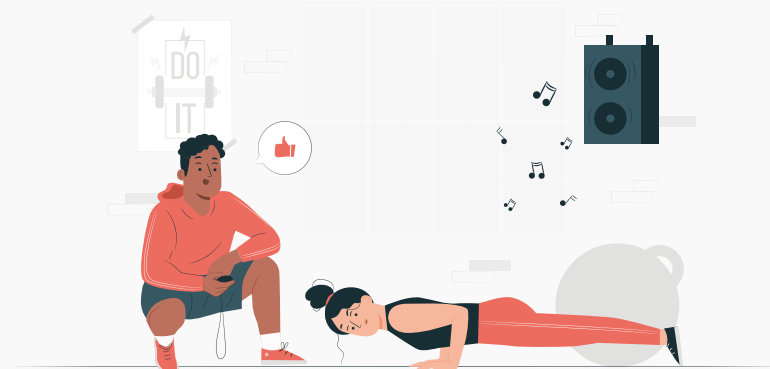
4.5.2 Open Spaces and Fields

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. These sports venues are primarily used for physical education classes, training of school representative teams, and school-approved activities, encouraging faculty and students to utilize these facilities to enhance communication, promote physical and mental well-being, and enrich extracurricular activities.

The athletic field (the playground), outdoor basketball court, and volleyball court are made available for recreational use by residents of surrounding communities, without affecting NKUST's lessons and activities. This promotes exercise, and enhances the physical and mental health and well-being of community residents. To provide faculty, students, and community members with sports-related activities, the management and usage guidelines for sports facilities have been established under the framework of the 'Key Points for Revenue and Expenditure, and Management of Facility Usage.' These guidelines outline the proper usage of sports venues, along with important precautions and regulations.



▲ The basketball court at NKUST's Cijin Campus



05.

Green University

5.1	Smart Campus	84
5.2	Energy and Carbon Management	85
5.3	Air Quality and Environmental Monitoring	88
5.4	Water Stewardship	89

5.5	Waste Management	90
5.6	Green Energy Transportation	91
5.7	Campus Ecology	93
5.8	Green Building	94
5.9	Green Procurement	94





5.1 Smart Campus

In recent years, NKUST has actively addressed the challenges posed by the digital age and the COVID-19 pandemic, focusing on driving digital transformation to enhance the convenience, safety, and energy efficiency of campus life. Our Smart Campus project focuses on six key aspects: energy saving and control, campus safety, transportation, convenience of life, e-administration, and smart communication. By implementing IoT devices, cloud computing, and digitization, we aim to improve service efficiency, eliminate geographical barriers between campuses, and reduce energy waste, indirectly achieving the goals of energy saving and carbon reduction. In 2023, we upgraded our smart classrooms by incorporating features such as AI-powered switchboards, further enhancing the level of intelligence in our teaching facilities.

▼ Development of Six Key Aspects for Smart Campus Projects

Six Key Aspects	Development System	Description
 Energy saving and control	Smart classroom and meeting room management system	● Resolve the access control for general courses and meeting rooms. ● Supplemented by the power management system combined with intelligent scheduling management, the power supply of the space will be turned off during periods when there are no classes or when it is not being used to avoid unnecessary energy waste. ● The aforementioned sites are equipped with access control devices to manage and record the electricity supply to light, air conditioner, and other equipment. ● In 2023, a total of 197 classrooms were established, with 94 school-owned classrooms undergoing optimized renovations. These improvements included enhancing the classroom environment, advancing the digitization of equipment, and upgrading to more comfortable desks and chairs.
 Campus safety	Cross-campus surveillance integration system	● The system autonomously monitors each camera and proactively reports any abnormalities or malfunctions. This allows for effective and prompt management of the operating status of the equipment, as well as the provision of automatic retrieval function for surveillance footage. ● It reduces the amount of time spent by personnel in assisting with the retrieval of surveillance footage, and for handling campus cases, video files can be provided to the responsible units more quickly, thereby assisting in shortening the timeline to solve a case. ● By improving the campus security surveillance system, campus facilities can be properly maintained and preserved to obtain substantial benefits and realize efficient management of property resources.
 Transportation	Parking space indicator system	● For each parking area in the Jiangong Campus and First Campus, the remaining number of parking spaces is separately counted, and the statistics are instantly synchronized to the corresponding outdoor LCD smart signage. ● Reducing the need for drivers to drive around searching for parking spaces can effectively reduce fuel consumption and time waste of repeated circling around the campus. It is estimated that the indicator system reduced the carbon emissions of Jiangong Campus and First Campus by 291 kg per day²⁵ in 2023.
 Convenience of life	Smart Cloud iPOS System	● By using NKUST self-developed Smart Cloud iPOS System, it is possible to pay various administrative fees through mobile multiple payments. ● The system automatically arranges documents, and after confirmation and approval by the personnel of General Administration Division, the system automatically prints the application documents. Students can pick up the documents in person after receiving automated message notifications, or the documents can be sent to the applicant by mail. The complete automation process is more efficient and significantly reduces waiting time.



E-administration

New version of affairs application system

- Faculty members, staff, and students can apply for various administrative services of the General Administration Division, including vehicle access control for events, hanging promotional flags, displaying multimedia signage, refunding of air-conditioning cards and parking permit, and canceling traffic violations 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.

Enrollment information viewing system

- In order to prevent hard copies from being damaged and unable to be checked and to extend the preservation period of hard copies, digitalization and scanning of enrollment information hard copies have been carried out, and are imported into the hard copy data digitalization system.
- Allows each campus to check enrollment information over the years to reduce the time spent on manual searching of hard copy documents and enhance overall administrative efficiency



Smart communication

Cross-campus exchange 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 a member of global citizens, it is important to consider how to incorporate the spirit of green campus into each campus through effective practical actions, guiding teachers and students to adopt a low-carbon lifestyle and utilizing the advantages of spacious campuses, as well as the campus ecological environment and natural landscapes to actively construct and develop new concepts of green 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 source. In 2023, we replaced old fluorescent lamps, upgraded air conditioners older than nine years, and implemented other energy-saving measures, resulting in a total energy savings of approximately 265,076 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.

1

Formulate energy saving goals and implementation plans.

2

Discuss energy saving improvement countermeasures and measures.

3

Control and evaluate the energy saving promotion matters of each unit.

4

Propaganda, education, and training on energy saving matters.

5

Other matters related to energy saving.





In terms of energy efficiency, NKUST aims to maintain an average annual electricity savings rate of 1% or higher. Based on electricity consumption data from the past four years, total electricity usage in 2023 was 40,815,454 kWh, with an energy use intensity (EUI) of 69.1. Compared to 2020, total electricity consumption decreased by approximately 2.78%.

▼ Electricity Consumption and Energy Use Intensity (EUI) at NKUST Over the Past Four Years²⁶

Years	Electricity Consumption	Floor Area of the Building	Energy Use Intensity (EUI)
2023	40,815,454	590,851	69.1%
2022	40,675,876	590,851	68.8%
2021	39,537,328	590,851	66.9%
2020	41,855,246	590,851	70.8%

To understand greenhouse gas emissions, NKUST has defined its organizational boundaries in accordance with ISO 14064-1:2018 and the Ministry of Environment's Greenhouse Gas Inventory Guidelines (2024 Edition). By calculating fuel consumption and electricity usage for official vehicles, we have conducted a self-assessment of our greenhouse gas emissions for 2023, which amounted to 20,188.23 CO₂e.

▼ Greenhouse gas emissions in the past three years

Unit: MTCO₂e

Scope	2023	2022	2021
Scope 1 ²⁷	25.4	105	99.8
Scope 2 ²⁸	20,163	20,135	20,125
Total	20,188	20,239	20,224



1. The adoption of energy-saving measures in 2023 resulted in a direct reduction of energy consumption by 954.27 gigajoules (GJ).
2. The direct reduction in greenhouse gas emissions due to the adoption of reduction measures was 131 MTCO₂e in 2023.



5.2.2 Solar Power Generation

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 2023, a total of 5,570,683 kWh of electricity was generated:

- ① 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 620,680 kWh in 2023).
- ② Roof rental income:
(1)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 553,763 kWh in 2023).
(2)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 4,371,240 kWh in 2023).
- ③ 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 25,000 kWh was generated in 2023).
- ④ NKUST currently operates photovoltaic systems through three methods: charges for self-built system which sold to Taipower, roof rental income, and self-built power generation for own use. The total electricity generated in 2023 was 5,570,683 kWh, an increase of approximately 3,592,674 kWh compared to 2022.



▲ Yanchao Campus Dormitory Solar Power System

▼ Renewable energy facilities and generation capacity, renewable energy certificate purchases at NKUST in 2023

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)	613,208	-
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)	553,763	-
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)	-	26,000
Kaohsiung City Central Government Public Roof Joint Bidding and Leasing Project 2,979.76kW (10.7271GJ)	4,370,920	-
Total	5,537,891	26,000

▼ Renewable energy usage at NKUST in the past three years

Unit: kWh

Years	Renewable energy generation	Green certificate generation	Total
2023	5,537,891	26,000	5,563,891
2022	1,946,009	32,000	1,978,009
2021	1,223,287	36,000	1,259,287

²⁶ NKUST's electricity consumption is measured based on the period from January 1 to December 31 of each year.

²⁷ NKUST can only provide greenhouse gas emissions data for fuel consumption by official vehicles under Scope 1. Data on emissions from other man-made systems, such as air conditioning and water supply equipment, are unavailable.

²⁸ NKUST calculates Scope 2 emissions by multiplying the electricity consumption in 2023 by a carbon emission factor of 0.494.

5.3 Air Quality and Environmental Monitoring

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.

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

1. Regular Indoor Air Quality Testing

NKUST conducted biennial indoor air quality analysis at the Nanzih Campus, Yanchao Campus and Cijin Campus in 2023 in accordance with the Indoor Air Quality Act. The analysis reports of each campus met the regulatory standards and received excellent rating (Nanzih Campus and Yanchao Campus) and good rating (Cijin Campus). Relevant information can be found on NKUST's Environmental, Occupational Safety and Health Center website.



• Indoor Air Quality Testing Report

2. Items and methods of analysis are as follows:

1. Carbon Dioxide (CO₂): Infrared Method (NIEA A448.11C)
2. Particulate Matters (PM10): Beta Ray Attenuation Method (NIEA A206.11C)
3. Formaldehyde: High Performance Liquid Chromatography (HPLC) of DNPH Derivative (NIEA A705.12C)
4. Bacteria: Concentration of Germs in the Air Testing Method (NIEA E301.15C)



◀ Indoor air quality periodic inspection (CO₂, PM10, Formaldehyde) at the Leisure Reading Area, 2nd floor, Yanchao Campus Library

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:

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.



• Campus Environmental Monitoring Report



5.4 Water Stewardship

The total water consumption for 2023 was 640,162 m³, a slight increase compared to 2021 and 2022. However, due to the impact of the COVID-19 pandemic, including the implementation of preventive measures and the shift to online teaching, the water consumption in 2023 remains lower than the 2019 baseline of 664,316 m³. The total water consumption for 2023 was 640,162 m³, representing a reduction of 24,154 m³, or a 3.64% decrease.

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

Unit: kWh

Years	Total water consumption	Water consumption per capita
2023 ²⁹	640,162	21.03
2022	595,549	19.31
2021	585,838	18.92

Wastewater Reclamation and Reuse at Sewage Treatment Plants

The First Campus and Yanchao Campus at NKUST have not yet completed the connection to the sewage piping system. 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. Meanwhile, the other campuses have already been incorporated into the sewage piping system.

1. First Campus

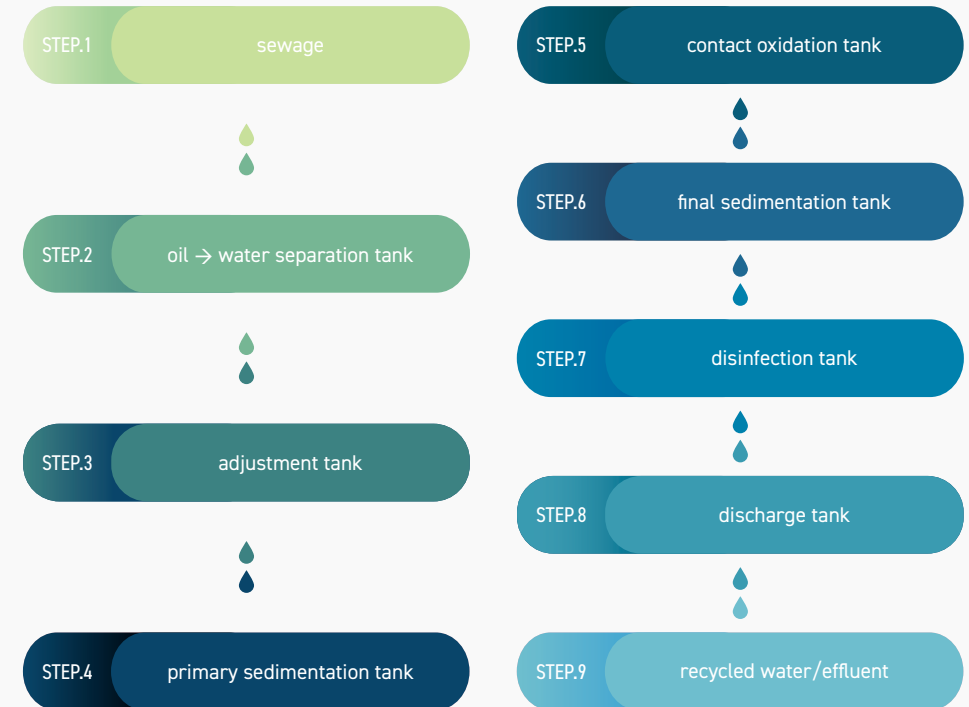
The East Campus has one sewage treatment plant, with the main sewage sources being domestic sewage from the teaching area buildings and laboratory washing sewage. After treatment every day, approximately 7 m³ of recycled water are used for green area irrigation, and the rest, approximately 216 m³, is discharged. The annual treatment capacity is approximately 78,705 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 64 m³, which is treated and injected into the ecological pool for reuse as effluent. The annual treatment capacity is approximately 23,172 m³. The sewage generated by the Lequn Building in the West Campus is treated and discharged, and the annual treatment capacity is approximately 25,512 m³. The total annual treatment capacity of the West Campus is approximately 48,684 m³.

According to the statistics, the total volume of recycled water for reuse in 2023 was approximately 25,746 m³ (approximately 2,574 m³ in the East Campus and 23,172 m³ in the West Campus).

²⁹ The total number of individuals used in calculating water consumption per capita excludes part-time assistants. In 2023, this number was 30,435.

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

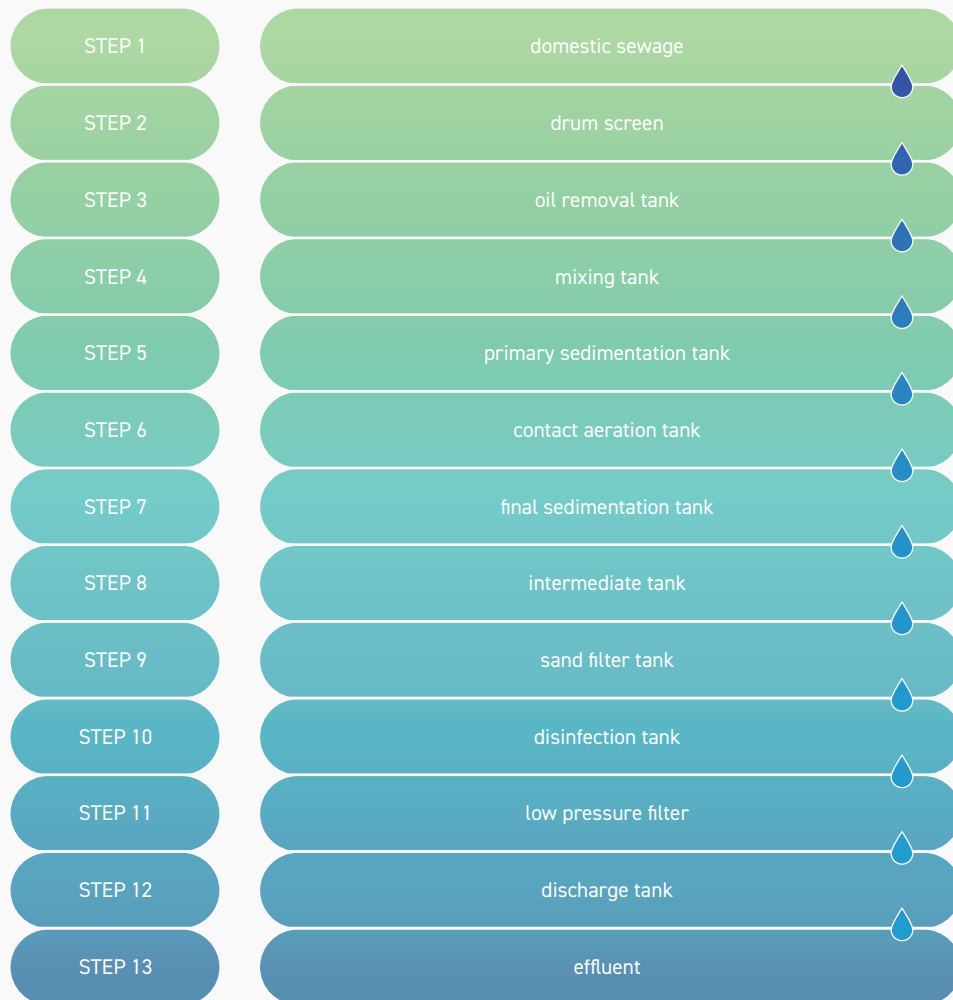


▲ Sewage treatment plant at the First Campus

2. 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 24,151 m³, and the treated sewage is discharged to the tributary of the Dianbao River.

The sewage treatment procedure at the Yanchao Campus is as follows:



▲ Sewage treatment plant at the Yanchao 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.

5.5 Waste Management

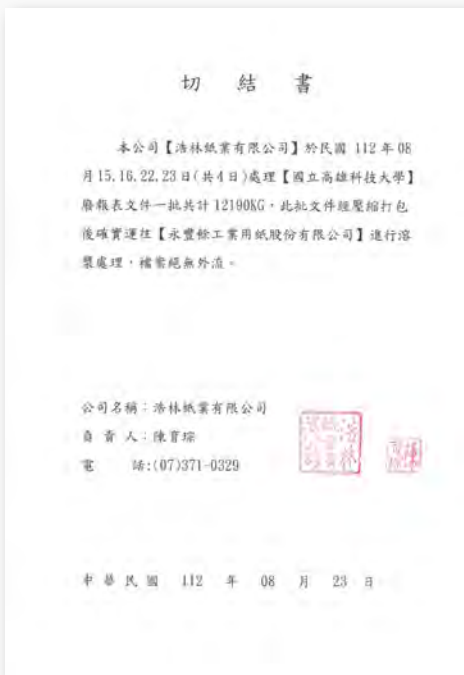
To maintain campus cleanliness and enhance the teaching environment, NKUST adheres to the regulations of the Ministry of Environment, promoting waste reduction and resource recovery to facilitate resource recycling and reuse. Each year, we commission licensed waste management companies to handle the collection, loading, transportation, and processing of waste on campus. Additionally, recycling facilities are set up across the campus, and waste sorting is promoted through official email communications. Through these collaborative efforts, we aim to achieve waste reduction and resource recovery goals, improving environmental sanitation and mitigating environmental loading.

General waste

NKUST promotes teaching activities and environmental protection initiatives through the implementation of the 3R environmental protection measures (Reduce, Reuse, Recycle). Regular campaigns are conducted to promote waste reduction and resource recycling, and resource recycling bins have been installed throughout the campus to promote the sustainable use of resources. Effective January 2023, we have transitioned our document destruction method from incineration to dissolving into pulp by water. This change aligns with our goal of resource sharing and promotes the concept of resource recycling and reuse. In 2023, the total amount of waste generated by NKUST was approximately 1,137.61 metric tons. This included 906.25 metric tons of garbage incinerated, 149.23 metric tons of general recyclables, 69.94 metric tons of scrapped property recycled, and 12.19 metric tons of recycling amount of water-dissolving into pulp by water.



▲ The document destruction operations of various units of NKUST have been changed from incineration destruction to dissolving the documents into pulp (i.e., dissolving into pulp by water)



▲ Certificate of transportation and disposal issued by environmental protection companies

Experimental waste

The waste generated by NKUST's laboratory included chemical waste liquids, waste lubricants, expired chemicals and biomedical waste (such as animal carcasses). We have contracted with qualified waste disposal companies to handle these wastes, and we report and track the weight of the waste through the Ministry of Environmental Protection's management system. In 2023, NKUST commissioned the Environmental Resources Research and Management Center of National Cheng Kung University to handle the waste liquid treatment of the Jiangong Campus, First Campus, and Nanzih Campus. The total amount of NKUST's experimental waste generated was approximately 9.025 metric tons, with 4.051 metric tons by chemical treatment and 4.974 metric tons by incineration.

Construction waste

General waste, general industrial waste, and hazardous industrial waste generated during the construction, demolition, decoration, and repair of buildings shall be legally disposed of by commission or reused in accordance with the provisions of the Waste Disposal Act. The surplus mud, soil, sand, stones, bricks, tiles, and concrete blocks generated from construction projects and public construction are considered valuable soil and stone resources if they can be temporarily stored and piled up for recycling, sorting, processing, transporting, treating, and reusing. Those soil and stone resources shall be managed in accordance with the Ministry of the Interior's construction spoil disposal treatment plan.

▼ Total waste generation and disposal methods in the past three years

Unit: Metric tons

Type of Waste	2023	2022	2021
General waste	1,137.61	1,013.46	1,083.93
Waste Incineration	906.25	801.16	946.93
General Recycling	149.23	138.51	137
Scrapped Property Recycling	69.94	68.95	0
Recycling of Water-Dissolving Into Pulp By Water	12.19	4.84	0
Construction waste	47.22	893	43.63
Experimental waste	9.025	11.487	10.617

5.6 Green Energy Transportation

1. Taxi ride-sharing 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 2023, 24,163 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.
2. Campus Shuttle Service: 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 2023, 90,934 faculty, staff, and students took the school vehicles.

3. Campus shared bicycles: Yanchao Campus and First Campus are vast and 530 shared bicycles are provided for the use by teachers and students with campus. There are dedicated personnel responsible for maintenance.
4. 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 energy transportation in the past three years

Types of Vehicles within Campus	2023		2022		2021	
	Total	Number of Electric Vehicles	Total	Number of Electric Vehicles	Total	Number of Electric Vehicles
School vehicles	14	0	14	0	14	0
Cars	4,901	33	4,809	13	3,954	15
Motorcycles	14,966	403	17,550	593	18,433	707

▼ Statistics on commuting items in the past three years

Unit: Number of Individuals

	Student		Faculty and staff	
	Cars	Motorcycles	Cars	Motorcycles
2023/2024 Academic Year	1,327	14,174	1,159	1,080
2022/2023 Academic Year	1,349	16,960	1,510	1,146
2021/2022 Academic Year	1,444	18,441	1,517	1,211

▼ Statistics on sustainable commuting in the past three years

	2023	2022	2021
Taking Ride-sharing Transportation	115,097 people	100,135 people	173,333 people
Number of bicycle applications	382 people	419 people	478 people
Number of shared bicycles within campus	530 bicycles	560 bicycles	510 bicycles

5.7 Campus Ecology

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 key functional orientations of the campus ecological pool are as follows:

1. **Drainage and flood storage:** The ecological pool, with an area of approximately 14,000 square meters, can achieve a flood storage capacity of 10,000 m³. It controls floods spread and reduces damage to low-lying areas during heavy rains. Additionally, it serves as a water storage facility during dry seasons.
2. **Water resource recycling:** Recycling of domestic wastewater and sewage from the two student dormitories, Jingye Building and Lequn Building, has not only reduced the discharge of 90,000 m³ of domestic wastewater and sewage, but also reduced the overall water consumption in the environment, based on one year of observation.
3. **Enhancement of landscape recreation function:** Not only does it provide students with outdoor recreational space, but it also offers nearby residents a natural ecological park.
4. **Ecological diversity of campus landscape:** More than 60 kinds of birds, insects, aquatic plants and tree species are nurtured around the ecological pool.
5. **Native Aquatic Flora and Fauna Conservation:** 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.
6. **Providing an Educational Space for Ecological Environments:** Creating an eco-campus to cultivate students' environmental awareness and promote the campus practices of sustainable development principles.



▲ [Black-winged Stilt Pool at the First Campus](#)

Yanchao Campus is located in Yanchao District, Kaohsiung City. A tributary of the Dianbao River flows through the campus, creating a serene environment. The entire area covers 109 hectares, of which only about 10 hectares are available for development. The rest consists of undeveloped slopes that have retained the original forest appearance, making it rich in ecological resources. Each of NKUST five campuses has its own unique ecological features. Please visit our official website to download a stroll map and experience the leisurely and relaxing natural ecological environment.



▲ [Stroll map of Yanchao Campus](#)



• [Download Walking Map](#)

Furthermore, as Taiwan is located in tropical and subtropical regions 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 Bifenthrin and Permethrin. These insecticides are effective in preventing mosquito breeding, thereby ensuring a healthy environment on campus.

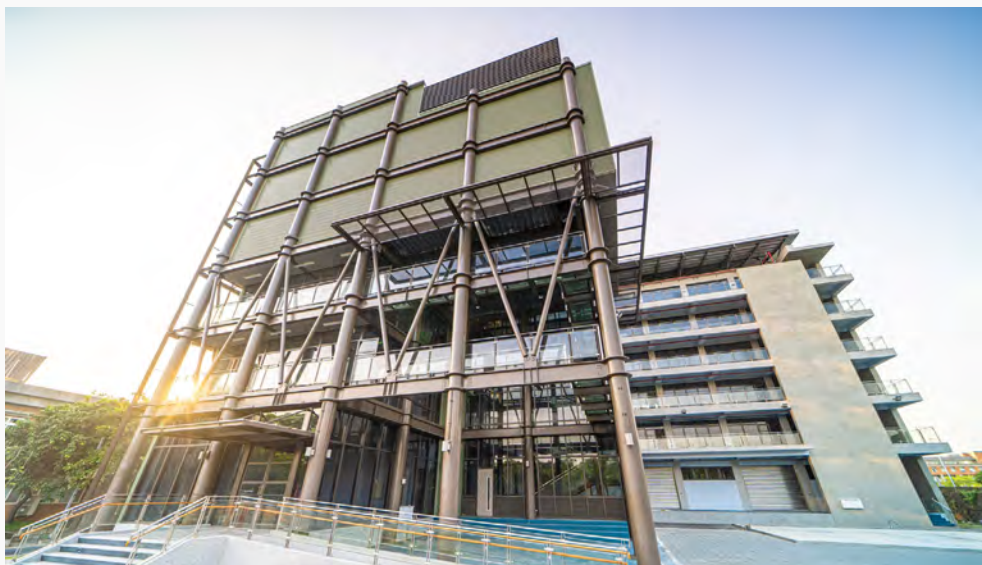
To maintain the campus landscape and prevent the breeding of dengue fever mosquitoes, the General Administration Division of NKUST, following the recommendations of a tree doctor, has adopted a method of periodically filling tree cavities with lime powder. This approach avoids the potential negative impact of using foaming agents on tree growth, achieving a dual effect of protecting tree health and preventing mosquito breeding.



5.8 Green Building

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. NKUST has completed a total of 12 green buildings. Among them, the College of Hydrophere 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. The phase one of faculty members, staff, and student dormitory of Yanchao Campus and the Administration Building of Yanchao Campus has passed five indicators and seven indicators, respectively, both receiving bronze-level green building classification. The Second Building of Industrial Experimental Park in the First Campus 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.

Green buildings are evaluated based on four major indicator groups of ecology, energy saving, waste reduction, and health, which can be divided into nine indicators, including biodiversity indicator, greening amount indicator, base water conservation indicator, daily energy saving indicator, carbon dioxide reduction indicator, waste reduction indicator, indoor environment indicator, water resources indicator, and sewage and waste improvement indicator. The recently completed construction project for the Southern Taiwan Emergency Response Training and Logistics Center in NKUST First Campus has achieved eight indicators for greening amount, base water conservation, daily energy saving, carbon dioxide reduction, waste reduction, indoor environment, water resources, and sewage and waste improvement.



▲ Southern Taiwan Toxic Substance Emergency Response Training and Logistics Center at the First Campus - Silver level



▲ Administration Building at the Yanchao Campus - Bronze Level

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 response to the Executive Yuan's 'Regulations for Priority Procurement of Green Products' and the related procurement performance evaluation and scoring methods, NKUST prioritizes the use of the green-label and environmentally friendly products listed on the Green Living Information Platform of Environment Protection Administration and actively promotes green procurement practices within campus. In 2023, the overall proportion of green procurement items reached 99.6%. Green procurement of electronic products (including host computers, printers, 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		
	2023	2022	2021
Overall green procurement project	99.6%	99.72%	-
Type I designated procurement environmentally friendly products	99.6%	99.60%	99.60%
Type II and III designated procurement environmentally friendly products	33.9%	-	73.50%
Electronic products	100%	99.56%	99.46%
Sustainable cleaning supplies	100%	100%	100%
Office paper	100%	100%	-

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

Environmental Benefit	2023	2022	2021
Reduced tree felling (number of trees)	9,216	8,745	8,669
Reduced carbon dioxide emissions (tons)	40.07	38.49	37.98
Waste reduction (tons)	0.04	0.06	0.05
Cost reduction (NT\$)	227,654.55	218,676.84	215,981.07



Environmental benefits generated from green procurement in 2023 are as follows:

1. Reduced tree felling by 9,216 trees, a decrease of 5.38% compared to 2022.
2. Reduced carbon dioxide emissions by 40.07 tons, a decrease of 1.58 tons compared to 2022.
3. Reduced cost by NT\$227,654.55, a reduction of NT\$58,977.71 compared to 2022.



Appendix

Sustainability Performance Summary Table

Sustainable courses	Item	Unit	2021	2022	2023	Corresponding Chapter
	Sustainable courses	Course	1,077	1,199	1,344	3.2.1 Sustainable Courses
	Departments offering at least one sustainable course	Club	58	70	70	3.2.1 Sustainable Courses
	Ratio of departments offering at least one sustainable course to all departments ³⁰	Percentage	90.6%	97.2%	97.2%	3.2.1 Sustainable Courses
	Departments that list sustainable courses as required credits	Club	34	38	46	3.2.1 Sustainable Courses
	Ratio of departments that list sustainable courses as required credits to all departments	Percentage	53.1%	52.8%	63.9%	3.2.1 Sustainable Courses
Sustainable research	Item	Unit	2021	2022	2023	Corresponding Chapter
	Journal articles on sustainable research	Article	162	283	340	3.5.1 Research Projects and Papers on Sustainability
	Research projects on sustainability	Project	194	141	199	3.5.1 Research Projects and Papers on Sustainability
	Research fellow engaged in sustainability-related research projects/journal articles	People	222	133	178	3.5.1 Research Projects and Papers on Sustainability
	Open Access Journal Article	Article	429	525	367	3.5.1 Research Projects and Papers on Sustainability
	Ratio of Open Access Journal Article to all journal articles	Percentage	50.8%	54.8%	46.1%	3.5.1 Research Projects and Papers on Sustainability
Smart green campus	Item	Unit	2021	2022	2023	Corresponding Chapter
	Electricity consumption	kWh	39,537,328	40,675,876	40,815,454	5.2.1 Energy Saving Policy
	Energy Unit Index (EUI)	kWh/square meter	66.9	68.8	69.1	5.2.1 Energy Saving Policy
	Greenhouse gas emissions (Scope 1)	MTCO ₂ e	99.8	105	25.4	5.2.1 Energy Saving Policy
	Greenhouse gas emissions (Scope 2)	MTCO ₂ e	20,125	20,135	20,163	5.2.1 Energy Saving Policy
	Renewable energy generation (Including feed-in tariff and green energy certificates)	kWh	1,259,287	1,978,009	5,570,683	5.2.2 Solar Power Generation
	Statistics on waste (including general waste, resource recycling, experimental waste, and construction waste)	Metric ton	1,139	1,025	1,194	5.5 Waste Management
	Water consumption	m ³	585,838	595,549	640,162	5.4 Water Stewardship
	Water consumption per capita	m ³ /person	18.92	19.31	21.03	5.4 Water Stewardship
	Ratio of type I designated procurement environmentally friendly products	Percentage	99.6%	99.6%	99.6%	5.9 Green Procurement
	Valid Green Building Label Certificate (including Green Building Candidate Certificate)	Certificate	3	4	4	5.8 Green Building
	Number of passengers taking school vehicles	People	173,333	100,135	115,097	5.6 Green Energy Transportation
	Number of bicycle applications	Number of Cases	478	419	382	5.6 Green Energy Transportation

³⁰ All departments include independent institutes, doctoral programs, part-time students, and degree programs, totaling 72 departments.

Diversification
and well-being

Item	Unit	2021	2022	2023	Corresponding Chapter
Proportion of participants in University Council					
Number of academic-related representatives	Percentage	82%	82%	83%	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	4.23	4.26	3.06	2.1.1 Decision-making Meetings and Organizations
Economically disadvantaged students					
Number of incentives distributed	Amount	20,448,545	20,748,615	17,657,682	3.1.3 Support for Economically Disadvantaged Students
Number of people incentives distributed to	Applicant	2,303	4,384	3,568	3.1.3 Support for Economically Disadvantaged Students
Tuition and miscellaneous fees exemption					
Requested amount	Amount	81,906,048	84,624,460	84,412,430	3.1.3 Support for Economically Disadvantaged Students
Number of applicants	Applicant	4,824	4,961	4,940	3.1.3 Support for Economically Disadvantaged Students
Student loans					
Requested amount	Amount	271,298,777	260,697,836	253,764,064	3.1.3 Support for Economically Disadvantaged Students
Number of applicants	Applicant	9,163	8,809	8,430	3.1.3 Support for Economically Disadvantaged Students
Scholarships and bursaries					
Requested amount	Amount	41,502,886	43,177,363	30,337,635	3.1.3 Support for Economically Disadvantaged Students
Number of applicants	Applicant	3,200	3,375	3,081	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	2021	2022	2023	Corresponding Chapter
Number of University Social Responsibility Program	Program	5	5	5	4.1 University Social Responsibility
Number of government sustainability-related projects undertaken by faculty members and staff	Club	71	25	25	3.5.4 Sustainable Government Collaboration Projects
Number of sustainable clubs	Club	13	9	2	3.3.1 Sustainable Clubs
Number of sustainability-related continuing education courses	Course	59	95	8	3.2.2 Continuing Education



SASB:Education

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter	Page
Data Security		Description of approach to identifying and addressing data security risks	2.8 Information Security	P.59
	SV-ED-230a.2	Description of policies and practices relating to collection, usage, and retention of student information	2.8 Information Security	P.59
	SV-ED-230a.3	(1) Number of data breaches (2) Percentage involving personally identifiable information (PII) (3) Number of students affected	1. 0 cases 2. 0% 3. 0 people	P.60
Quality of Education & Gainful Employment	SV-ED-260a.1	Graduation rate	89.2%	P.92
	SV-ED-260a.2	On-time completion rate	85.5%	P.92
	SV-ED-260a.3	Job placement rate	93.90%	P.92
	SV-ED-260a.4	(1) Debt-to-annual earnings rate and (2) Debt-to-discretionary income rate	Not applicable (NKUST is a non-profit organization)	-
	SV-ED-260a.5	Program cohort default rate	Not applicable (NKUST is a non-profit organization)	-
Marketing & Recruiting Practices	SV-ED-270a.1	Description of policies to assure disclosure of key performance statistics to prospective students in advance of collecting any fees and discussion of outcomes	2.1.3 Financial Information	P.33
	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	P.33
	SV-ED-270a.4	Revenue from: (1) Title IV funding, (2) GI Bill funding, and (3) private student loans	Not applicable (NKUST is a non-profit organization)	-
Activity Metrics	SV-ED-000.A	Number of students enrolled	28,069 people	P.13
	SV-ED-000.B	Number of applications received for enrollment	5,921 people (number of individual applicants for admission at NKUST)	P.61
	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 Diverse Students	P.62
	SV-ED-000.D	Number of: (1) teaching staff and (2) all other staff	1. 1,034 people 2. 2,336 people	P.42



SDGs Index

SDGs	Corresponding Sub-item	Corresponding Chapter	Page
 SDGs 1 : No Poverty	1.3: Social Protection Systems	3.3.2 Sustainable-related Activities	P.57
	1.4: Rural Services	3.1.3 Support for Economically Disadvantaged Students 4.1 University Social Responsibility	P.51 P.74
	1.5: Recovery After Disaster	4.1 University Social Responsibility	P.74
 SDGs 2 : Zero Hunger	2.3: Promotion of Sustainable Agriculture	2.7.3 Food Safety 3.4 Sustainable Product Development 4.1 University Social Responsibility	P.44 P.58 P.74
	2.4: Eco-friendly Farming Environment	4.1 University Social Responsibility	P.74
 SDGs 3 : Good Health and Wellbeing	3.6: Reduction of Injuries and Deaths from Accidents	2.7.1 Occupational Safety	P.41
	3.9: Reducing Pollution	2.7.2 Health Promotion 3.2.1 Sustainable Courses 5.3 Air Quality and Environmental Monitoring	P.41 P.53 P.88
 SDGs 4 : Quality Education	4.2: Childhood Education	4.1 University Social Responsibility	P.74
	4.3: Equal Access to Education	3.1 Admissions and Financial Aid 3.2 Sustainable Education 3.5.4 Sustainable Government Collaboration Projects	P.48 P.53 P.62
	4.4: Competency Development	Everlasting Sustainable Glory 3.8.1 Career Exploration and Counseling	P.4 P.69
	4.5: Equity Education for the Underprivileged	3.1 Admissions and Financial Aid	P.48
	4.7: Sustainable Education	3.2.1 Sustainable Courses	P.53
	4.a: Equal Education Facilities	4.3 Resource Sharing 4.4 Barrier-free Campus 4.5 University Historical Buildings and Open Space	P.78 P.81 P.81

SDGs	Corresponding Sub-item	Corresponding Chapter	Page
 SDGs 5 : Gender Equality	5.1: Ending Discrimination Against Women	2.3.1 Diverse and Equal Workplace	P.34
	5.5: Women's Participation in Decision-making	2.1.1 Decision-making Meetings and Organizations	P.24
	5.c: Legislation Improvement	2.4 Gender Equality Issues	P.37
 SDGs 6 : Clean Water and Sanitation	6.3: Improving Water Quality 6.3: Eliminating Dumping of Garbage	2.7.3 Food Safety 5.5 Waste Management	P.44 P.90
	6.4: Water Recycling	5.4 Water Stewardship	P.89
	6.6: Water Ecosystems	5.7 Campus Ecology	P.93
	6.b: Improving Community Water and Sanitation	4.1 University Social Responsibility	P.74
 SDGs 7 : Affordable and Clean Energy	7.1: Energy Services	3.2.1 Sustainable Courses 5.2 Energy and Carbon Management	P.53 P.85
	7.2: Renewable Energy Sharing	5.2 Energy and Carbon Management	P.85
	7.3: Energy Efficiency Enhancement	5.1 Smart Campus	P.84
 SDGs 8 : Decent Work and Economic Growth	8.3: Innovative Production Activities	4.1 University Social Responsibility 3.4 Sustainable Product Development	P.74 P.58
	8.5: Equal Employment	2.3 Workforce Diversity	P.34
	8.6: Reducing Unemployment Rate	3.2 Sustainable Education 3.8 Career counseling and performance of graduates	P.53 P.69



SDGs	Corresponding Sub-item	Corresponding Chapter	Page
 SDGs 9 : Industry, Innovation and Infrastructure	9.5: Encouraging Innovation and Research and Development	3.2.1 Sustainable Courses 3.5.3 Collaborative Sustainable Industry-Academia Projects 3.5.4 Sustainable Government Collaboration Projects 3.5.5 Marine Characteristic Research and Collaboration Plan 4.1 University Social Responsibility	P.53 P.61 P.62 P.63 P.74
 SDGs 10 : Reduced Inequalities	10.2: Promoting Diversity and Inclusion	2.1 Diversified Governance 2.3 Workforce Diversity	P.24 P.34
	10.3: Ensuring Equal Opportunities	2.3 Workforce Diversity 3.1 Admissions and Financial Aid	P.34 P.48
	10.4: Social Protection Policies	2.5 Grievance Mechanism 3.1.3 Support for Economically Disadvantaged Students 4.4 Barrier-free Campus	P.39 P.51 P.81
 SDGs 11 : Sustainable Cities and Communities	11.2: Sustainable Transportation Planning	5.6 Green Energy Transportation	P.91
	11.4: Conservation of Historical Buildings	4.5 University Historical Buildings and Open Space	P.81
	11.6: Reducing Environmental Harmful Impact	5.1 Smart Campus 5.2 Energy and Carbon Management 5.3 Air Quality and Environmental Monitoring 5.5 Waste Management 5.8 Green Building	P.84 P.85 P.88 P.90 P.94
	11.7: Barrier-free and Friendly Space	4.4 Barrier-free Space	P.81
	11.a: Connection with Communities	3.2.1 Sustainable Courses 3.3 Sustainable Campus Practices 4.1 University Social Responsibility	P.53 P.57 P.74
 SDGs 12 : Responsible Consumption and Production	12.4: Chemicals Treatment	5.5 Waste Management	P.90
	12.5: Waste reduction	5.5 Waste Management	P.90
	12.7: Green Procurement	5.9 Green Procurement	P.94
	12.8: Improving Sustainability Knowledge and Skills	3.1 Sustainable Education 3.3.2 Sustainable-related Activities 4.1 University Social Responsibility	P.53 P.57 P.74
	12.b: Assisting in the Development of Local Products	Everlasting Sustainable Glory 3.4 Sustainable Product Development 4.1 University Social Responsibility	P.4 P.58 P.74

SDGs	Corresponding Sub-item	Corresponding Chapter	Page
 SDGs 13 : Climate Action	13.2: Energy Saving and Carbon Reduction	5.1 Smart Campus 5.2 Energy and Carbon Management	P.84 P.85
	13.b: Climate Change-Related Mechanisms	Everlasting Sustainable Glory 3.5.4 Sustainable Government Collaboration Projects 4.1 University Social Responsibility	P.4 P.62 P.74
 SDGs 14 : Life below Water	14.1: Ocean Conservation	3.3.1 Sustainable Clubs 3.5.4 Sustainable Government Collaboration Projects	P.57 P.62
	14.7: Promoting the Value of Fishery Products	4.1 University Social Responsibility	P.74
	14.a: Improving Marine Knowledge and Skills	3.2.1 Sustainable Courses 3.5.5 Marine Characteristic Research and Collaboration Plan	P.53 P.63
 SDGs 15 : Life on Land	15.1: Conservation of Waters	5.4 Water Stewardship	P.89
	15.5: Habitat Creation	5.3 Air Quality and Environmental Monitoring 5.7 Campus Ecology	P.88 P.93
	15.9: Maintaining Ecological Diversity	5.7 Campus Ecology	P.93
 SDGs 16 : Peace, Justice and Strong Institutions	16.6: Transparency of Institution and Data	1.1 About NKUST 1.4 School Data 2.4 Gender Equality Issues 3.7 Academic and Ethical Integrity	P.6 P.11 P.37 P.68
	16.7: Responding to Public Opinion	1.5 Material Topics and Stakeholders	P.12
	16.10: Safe Access to Information	2.8 Information Security	P.45
	16.b: Promoting Equality	2.1 Diversified Governance 2.3 Workforce Diversity	P.24 P.34
 SDGs 17 : Partnership for the Goals	17.16: Multilateral Cooperation	1.3 Sustainable Concepts and Action Strategies 3.5.5 Marine Characteristic Research and Collaboration Plan 4.2 International Exchange	P.10 P.63 P.76
	17.15: Respect for Individual Differences	1.5 Material Topics and Stakeholders	P.12



STARS Index

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter	Page
Report Preface	PRE-1	Executive Letter	Message from the President	P.3
	PRE-2	Points of Distinction	Everlasting Sustainable Glory Educational Performance and Recognition	P.4
	PRE-3	Institutional Boundary	About This Report 1.1.2 Campus Scope and Services	P.2 P.6
	PRE-4	Operational Characteristics	1.4 School Data	P.11
	PRE-5	Academics and Demographics	1.1.3 Organizational Structure 1.4 School Data	P.7 P.11
Academics (AC)	AC-1	Academic Courses	3.2.1 Sustainable Courses	P.53
	AC-2	Learning Outcomes	3.2.1 Sustainable Courses	P.53
	AC-3	Undergraduate Program	3.2.1 Sustainable Courses	P.53
	AC-4	Graduate Program	3.2.1 Sustainable Courses	P.53
	AC-5	Immersive Experience	3.3 Campus Sustainability Practices	P.57
	AC-6	Sustainability Literacy Assessment	Under Planning	-
	AC-7	Incentives for Developing Courses	Under Planning	-
	AC-8	Campus as a Living Laboratory	3.3 Campus Sustainability Practices 3.4 Sustainable Product Development	P.57 P.58
	AC-9	Research and Scholarship	3.5 Academic Performance	P.59
	AC-10	Support for Sustainability Research	3.5.1 Research Projects and Papers on Sustainability	P.59
	AC-11	Open Access to Research	3.5.2 Open Access Journal Article	P.60
Engagement (EN)	EN-1	Student Educators Program	4.1 University Social Responsibility	P.74
	EN-2	Student Orientation	Under Planning	-
	EN-3	Student Life	3.3 Campus Sustainability Practices 4.1 University Social Responsibility	P.57 P.74
	EN-4	Outreach Materials and Publications	3.4 Sustainable Product Development	P.58
	EN-5	Outreach Campaign	3.3 Campus Sustainability Practices 4.1 University Social Responsibility	P.57 P.74
	EN-6	Assessing Sustainability Culture	Under Planning	-
	EN-7	Employee Educators Program	4.1 University Social Responsibility	P.74
	EN-8	Employee Orientation	2.7 Occupational Safety and Health Management	P.41
	EN-9	Staff Professional Development and Training	3.2.2 Continuing Education	P.54
	EN-10	Community Partnerships	4.1 University Social Responsibility	P.74



Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter	Page
Engagement (EN)	EN-11	Inter-Campus Collaboration	2.2 Advocacy and Collaboration 4.2 International Exchange	P.32 P.76
	EN-12	Continuing Education	3.2. Sustainable Education	P.53
	EN-13	Community Service	3.3 Campus Sustainability Practices 4.1 University Social Responsibility	P.57 P.74
	EN-14	Participation in Public Policy	3.5.4 Sustainable Government Collaboration Projects	P.62
	EN-15	Trademark Licensing	3.4 Sustainable Product Development	P.58
Operations (OP)	OP-1	Emissions Inventory and Disclosure	5.2.1 Energy Saving Policy 5.3 Air Quality and Environmental Monitoring	P.85 P.88
	OP-2	Greenhouse Gas Emissions	5.2.1 Energy Saving Policy	P.85
	OP-3	Building Design and Construction	5.8 Green Building	P.94
	OP-4	Building Operations and Maintenance	5.8 Green Building	P.94
	OP-5	Building Energy Efficiency	5.2.2 Solar Power Generation	P.87
	OP-6	Clean and Renewable Energy	5.2.2 Solar Power Generation	P.87
	OP-7	Food and Beverage Purchasing	2.7.3 Food Safety	P.44
	OP-8	Sustainable Dining	2.7.3 Food Safety	P.44
	OP-9	Landscape Management	5.7 Campus Ecology	P.93
	OP-10	Biodiversity	Under Planning	-
	OP-11	Sustainable Procurement	5.9 Green Procurement	P.94
	OP-12	Electronics Purchasing	5.9 Green Procurement	P.94
	OP-13	Cleaning and Janitorial Purchasing	5.9 Green Procurement	P.94
	OP-14	Office Paper Purchasing	5.9 Green Procurement	P.94
	OP-15	Campus Fleet	5.6 Green Energy Transportation	P.91
	OP-16	Commute Modal Split	5.6 Green Energy Transportation	P.91



Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter	Page
Operations (OP)	OP-17	Support for Sustainable Transportation	5.6 Green Energy Transportation	P.91
	OP-18	Waste Minimization and Diversion	5.5 Waste Management	P.90
	OP-19	Construction and Demolition Waste Diversion	5.5 Waste Management	P.90
	OP-20	Hazardous Waste Management	5.5 Waste Management	P.90
	OP-21	Water Use	5.4 Water Stewardship	P.89
	OP-22	Rainwater Management	5.4 Water Stewardship	P.89
Planning & Administration (PA)	PA-1	Sustainability Coordination	2.1.1 Decision-making Meetings and Organizations	P.24
	PA-2	Sustainability Planning	1.3 Sustainable Concepts and Action Strategies	P.10
	PA-3	Inclusive and Participatory Governance	2.1.1 Decision-making Meetings and Organizations	P.24
	PA-4	Reporting Assurance	Appendix Third Party Assurance Statement	P.107
	PA-5	Diversity and Equity Coordination	2.4 Gender Equality Issues	P.37
	PA-6	Assessing Diversity and Equity	2.3 Workforce Diversity	P.34
	PA-7	Support for Underrepresented Groups	3.1.3 Support for Economically Disadvantaged Students	P.51
	PA-8	Affordability and Access	3.1.3 Support for Economically Disadvantaged Students	P.51
	PA-9	Committee on Investor Responsibility	2.1.1 Decision-making Meetings and Organizations	P.24
	PA-10	Sustainable Investment	2.1.4 Investment Management and Sustainable Investing	P.30
	PA-11	Investment Disclosure	2.1.4 Investment Management and Sustainable Investing	P.30
	PA-12	Employee Compensation	2.3.2 Remuneration and Benefits Policy	P.36
	PA-13	Assessing Employee Satisfaction	2.4 Gender Equality Issues	P.37
	PA-14	Wellness Program	2.7.2 Health Promotion	P.41
	PA-15	Workplace Health and Safety	2.7 Occupational Safety and Health Management	P.41



GRI Index

Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter	Page
GRI 2: General Disclosures 2021	2-1	Organizational details	About This Report	P.2
	2-2	Entities included in the organization's sustainability reporting	About This Report	P.2
	2-3	Reporting period, frequency and contact point	About This Report	P.2
	2-4	Restatements of information	About This Report	P.2
	2-5	External assurance	Appendix Third Party Assurance Statement	P.107
	2-6	Activities, value chain and other business relationships	1.5 Material Topics and Stakeholders	P.12
	2-7	Employees	2.3.1 Diverse and Equal Workplace	P.34
	2-8	Workers who are not employees	2.3.1 Diverse and Equal Workplace	P.34
	2-9	Governance structure and composition	2.1.1 Decision-making Meetings and Organizations	P.24
	2-10	Nomination and selection of the highest governance body	2.1.1 Decision-making Meetings and Organizations	P.24
	2-11	Chair of the highest governance body	2.1.1 Decision-making Meetings and Organizations	P.24
	2-12	Role of the highest governance body in overseeing the management of impacts	2.1.2 Internal Control Mechanisms and Risk Management	P.28
	2-13	Delegation of responsibility for managing impacts	2.1.2 Internal Control Mechanisms and Risk Management	P.28
	2-14	Role of the highest governance body in sustainability reporting	2.1.1 Decision-making Meetings and Organizations	P.24
	2-15	Conflicts of interest	2.1.1 Decision-making Meetings and Organizations	P.24
	2-16	Communication of critical concerns	1.5.3 Listening to Stakeholders	P.20
	2-17	Collective knowledge of the highest governance body	2.1.1 Decision-making Meetings and Organizations	P.24
	2-18	Evaluation of the performance of the highest governance body	2.1.2 Internal Control Mechanisms and Risk Management	P.28
	2-19	Remuneration policies	2.3.2 Remuneration and Benefits Policy	P.36
	2-20	Process to determine remuneration	2.3.2 Remuneration and Benefits Policy	P.36
	2-21	Annual total compensation ratio	2.3.2 Remuneration and Benefits Policy	P.36
	2-22	Statement on sustainable development strategy	1.3 Sustainable Concepts and Action Strategies	P.10
	2-23	Policy commitments	Message from the President	P.3
	2-24	Embedding policy commitments	Message from the President 2.1.1 Decision-making Meetings and Organizations	P.3 P.24
	2-25	Processes to remediate negative impacts	2.5 Grievance Mechanism	P.39
	2-26	Mechanisms for seeking advice and raising concerns	2.1.2 Internal Control Mechanisms and Risk Management	P.28
	2-27	Compliance with laws and regulations	2.1.2 Internal Control Mechanisms and Risk Management	P.28
	2-28	Membership associations	2.2.1 Membership in Public Associations	P.32
	2-29	Approach to stakeholder engagement	1.5.2 Material Topics Management Policy	P.18
	2-30	Collective bargaining agreements	2.2.1 Membership in Public Associations	P.32



GRI Index for Material Topics

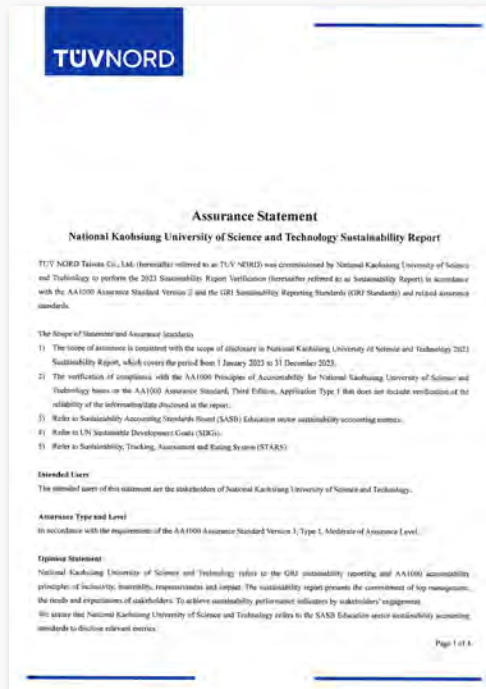
Topic Disclosed	Indicator Disclosed	Content Disclosed	Corresponding Chapter	Page
GRI 3: Material Topics 2021	3-1	Process to determine material topics	1.5.1 Identification of Material Topics	P.13
	3-2	List of material topics	1.5.1 Identification of Material Topics	P.13
Campus Ecology and Environmental Protection				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
NKUST Customized Topics		Ecology and Environmental Protection	Chapter 5: Green Campus	P.84
Student Awards and Counseling				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
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	P.50 P.51 P.69
Research, innovation, and Industry-academia Collaboration				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
NKUST Customized Topics		Academic research quality	3.5 Academic Performance	P.59
Teaching Quality Assurance and Evaluation				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
NKUST Customized Topics		Teaching Quality and Effectiveness	3.6 Teaching Quality Assurance	P.65
Sustainable Development strategy				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
NKUST Customized Topics		Action Strategies of Sustainable Development	1.3 Sustainable Concepts and Action Strategies	P.10
University Social Responsibility				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	4.1 University Social Responsibility	P.74



Academic and Ethical Integrity				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
NKUST Customized Topics		Academic and Ethical Integrity	3.7 Academic and Ethical Integrity	P.68
Information Security				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.8 Information Security	P.45
Compliance with laws and regulations				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
NKUST Customized Topics		Compliance with laws and regulations	2.1.2 Internal Control Mechanisms and Risk Management	P.28
University Affairs and Governance				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
NKUST Customized Topics		University Affairs and Governance	2.1.1 Decision-making Meetings and Organizations 2.1.2 Internal Control Mechanisms and Risk Management	P.24 P.28
International Linkages and Cooperation				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
NKUST Customized Topics		International Linkages	4.2 International Exchange	P.76
Financial Governance and Performance				
GRI 3: Material Topics 2021	3-3	Management of material topics	1.5.2 Material Topics Management Policy	P.18
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	2.1.3 Financial Information	P.29
	201-3	Defined benefit plan obligations and other retirement plans	2.3.2 Remuneration and Benefits Policy	P.36
	201-4	Financial assistance received from government	2.1.3 Financial Information	P.29



Third Party Assurance Statement



2023 NKUST SUSTAINABILITY REPORT



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