國立虎尾科技大學
NATIONAL FORMOSA UNIVERSITY

NFU National Formosa University

Sustainability Report

2024永續報告書


國立虎尾科技大學
NATIONAL FORMOSA UNIVERSITY

Contents

About This Report

This is the third Sustainability Report published by National Formosa University (NFU). The report has been prepared with reference to the Global Reporting Initiative (GRI) Standards 2021 and in response to the United Nations Sustainable Development Goals (SDGs) as well as the Task Force on Climate-related Financial Disclosures (TCFD) framework and practices.

Scope and Reporting Period

The scope of this report covers the overall operations of National Formosa University. As the University operates on an academic-year basis, the disclosure period includes Academic Year 112 (August 1, 2023 – July 31, 2024) or the calendar year 2024 (January 1, 2024 – December 31, 2024). Certain data are presented across one to three academic years, or one to three calendar years, and any differences in reporting periods are explained within the relevant chapters.

Feedback

If you have any suggestions or inquiries regarding the contents of this report, please contact us through the following channels:

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Publication Timeframe and Frequency

This report is published annually.
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Report Assurance

To ensure the quality of disclosure, NFU commissioned Aries International Verification Co., Ltd. to conduct assurance of this ESG Sustainability Report in accordance with the AccountAbility AA1000 Assurance Standard (AA1000AS v3, 2018).
Please refer to Appendix 3 for details.

Message from the President

National Formosa University (NFU) has long adhered to a practice-oriented approach to technical and vocational education, emphasizing industry–academia application and character cultivation. Our educational achievements have been widely recognized by society. Formerly known as Yunlin Institute of Technology—one of Taiwan's three leading technical institutes—NFU has upheld the motto of “Integrity, Justice, Precision, and Diligence,” and is committed to cultivating cross-disciplinary technological talents equipped with professional competence and positive social impact. In alignment with the United Nations Sustainable Development Goals (SDGs), NFU actively engages in local development, practices University Social Responsibility (USR), and advances smart and sustainable campus development through AI innovation and digital transformation.

NFU is the first university in Taiwan to establish an Office of Sustainability and Social Responsibility. Since its establishment in 2022, the University has achieved remarkable results in sustainability: in 2024, NFU received 2 Gold, 1 Silver, and 5 Bronze Awards at the Asia-Pacific and Taiwan Sustainability Action Awards; the Outstanding Sustainable University Award and the Silver Award for Sustainability Report at the Taiwan Sustainable University Awards; and the Green Design Award (Honorable Mention) at the Asia-Pacific Sustainability Expo with the theme “Toward Net-Zero Sustainability: NFU in Action.” Furthermore, NFU has been honored with the USR University Social Responsibility Award (First Prize) by Global Views Monthly for three consecutive years up to 2024, demonstrating the University's strong foundation in sustainable governance and local engagement.

In addition, in the 2024 Global Views Monthly “Best Universities in Taiwan Rankings,” NFU ranked among the top six national universities of technology, and was placed among the top five in the “Most Preferred Universities by Employers” survey conducted by 1111 Job Bank. These recognitions reflect NFU's excellence in bridging academia and industry as well as its strength in practice-oriented education. With the global trend of industrial smart transformation, NFU promotes cross-disciplinary integration of AI with engineering, manufacturing, agriculture, energy, and healthcare, striving to cultivate technological talents with immediate industry readiness. In collaboration with the Water Resources Agency, NFU launched the project “Huwei Tide: Resilient Waterfront Revitalization Plan” to build a riverbank environment where people and nature coexist harmoniously along the Huwei section of Beigang River. Simultaneously, the University has advanced initiatives such as the Higher Education Sprout Project, the Unmanned Aerial Vehicle (UAV) Base Project, and the Smart Energy Project, progressively establishing an educational practice network with significant social impact. From successfully launching the CubeSat “NutSat” into space, to partnering with the Ocean Conservation Administration to track the habitats of the Indo-Pacific humpback dolphin (a critically endangered species in Taiwan) using UAVs, and conducting autonomous vehicle subsystem tests around the Taiwan High-Speed Rail Yunlin Station area—NFU demonstrates the integration of cutting-edge technology, sustainable innovation, and social responsibility.

To uphold the spirit of sustainability and ensure information transparency, NFU has published its Sustainability Report for two consecutive years, earning the Silver Award for Sustainability Report at the 2024 Taiwan Sustainable University Awards. With this third Sustainability Report, we aim to present to all stakeholders NFU's efforts and achievements across three major dimensions—Governance, Environment, and Social Inclusion—and to work together toward a sustainable future.

President／
Dr. Shinn-Liang Chang

Sustainability Highlights

- 2024 Taiwan Sustainable University Awards – Received the Outstanding Sustainable University Award and the Silver Award for Sustainability Report
- 2024 APSAA Asia-Pacific Sustainability Action Awards – Received 1 Gold, 1 Silver, and 3 Bronze Awards
- 2024 TSAA Taiwan Sustainability Action Awards – Received 1 Gold and 2 Bronze Awards
- 2024 8th Taipei Golden Eagle Microfilm Festival – “Yunlin Farming Power” won the Bronze Award
- 2024 Asia-Pacific Sustainability Expo – NFU booth with the theme “Sustainability and Net-Zero: NFU in Action” won an Honorable Mention for the Green Design Award
- 2024 5th Global Views Monthly USR University Social Responsibility Awards – Won First Prize in the Ecology Co-existence Category
- 2024 Global Views Monthly Most Preferred University Students by Enterprises – Ranked 24th overall, Top 6 among National Universities of Technology
- 2024 Global Views Monthly Best Universities in Taiwan Rankings – Ranked in the Top 10 among technical and vocational universities
- 2024 1111 Job Bank “Most Preferred Universities by Enterprises” Survey – Ranked 5th among public technical and vocational institutions

NFU Honors

- 2024 International Invention Show, Warsaw, Poland – Won Gold Medal
- 2024 Tokyo Design & Invention Exhibition, Japan – Won Gold Medal
- 2024 Ministry of Education National IC Design and Smart Chip System Application Innovation Contest – Awarded Special Excellence, Excellence, Merit, and Design Completion Prizes
- 2024 3rd Chyun-Cheng & Syntec Cup Smart Robot Competition – Won Champion
- 2024 4th Smart Chip System Application Innovation Contest (Smart Environment Category) – Won Silver Award and Merit Award
- 2024 9th National College and University Programming Competition – Won 1 Gold, 2 Silver, and 2 Bronze Awards
- 2024 29th National Collegiate Information Application Service Innovation Competition –1st Place, Information Application Group VI Merit Award, Information Application Group VIII 2nd & 3rd Place, Information Application Group IX 2nd Place, TGOS Thematic Map Application Development 2nd Place, Asia–Silicon Valley 3.0 Smart IoT Innovation Group
- 2024 Smart Innovation Cross-Disciplinary Competition – Won 3rd Place and Merit Award
- 2024 2nd Smart Computing Innovation Application Project Competition – Won Bronze Award in the Healthcare Computing Group
- 2024 24th Macronix Golden Silicon Awards – Semiconductor Design and Application Contest – Won Jury Gold Award, Jury Bronze Award, and Rookie Award
- 2024 8th Innovation & Technology Challenge – Won 1st Place and 2 Corporate Awards
- 2024 World High School & Vocational Solar Model Car Competition – Won World Championship
- 2024 Former NFU UBA Foreign Student Xi Tu – Advanced to the Slovak Basketball League, becoming the first in Taiwan's university basketball history
- 2024 National Intercollegiate Athletic Games (Track and Field) – NFU student set a new National High Jump Record

ESG Management Performance

Environmental Sustainability

- No violations of environmental protection or occupational safety regulations in 2024
- Green buildings: 2
- Greenhouse gas emissions inventory: 13,385 metric tons CO_2e
- Renewable energy generation: 1.43 million kWh
- Replacement with energy-saving LED tubes: 1,481 units ★
- Proportion of green procurement: 96.09%
- Average daily water consumption per person: 56.07 liters/person-day

Social Inclusion

- Scholarships and financial aid: NT$ 401.7 million
- Continuing education: 214 classes, 3,774 participants
- Occupational safety and health training participants: 1,619
- Proportion of preferential procurement: 5.18%
- Participation in University Social Responsibility (USR): 14,249 person-times (faculty: 1,076; students: 6,639; assistants: 1,062; community partners: 5,472 ★)

University Governance

- Number of faculty and staff: 773 ★
- Student population: 11,976 (including 9,479 in day programs ★)
- Student–faculty ratio (day programs): 26.11
- Freshman enrollment rate: 94.38%
- Operating revenue: NT$ 2.043 billion ★
- Number of beneficiaries of flexible salary subsidies: 233
- Higher Education Sprout Project funding: NT$ 240 million (Ranked 4th among national universities of technology)
- Industry–academia collaboration: 245 projects, NT$ 112.43 million
- Certified talent cultivation in sustainability and ISO-related courses: 151 participants ★ (ISO 14064-1, 14064-2, 14067, 14068)
- Recipient of the Outstanding Sustainable University Award and Silver Award for Sustainability Report ★

Note: ★ denotes areas of significant improvement.

Achievements in Advancing the SDGs

National Formosa University (NFU) actively responds to pressing SDG issues and the transformation challenges faced by higher education. In the global trend toward net-zero, the University integrates ESG principles into institutional governance, striving to develop as a green university. Through digital construction of a smart campus, NFU achieves energy-saving goals while fulfilling university social responsibility by establishing the Office of Sustainability and Social Responsibility. This office integrates the expertise of faculty and students to address local issues and leverages higher education'sforward-looking technologies to promote campus sustainability and strengthen community connections.

Since 2022, the University has progressively aligned its operations and activities with the SDGs:Courses, journal papers, and conference papers are actively linked to SDG targets through self-reporting by faculty members or administrative units.Research projects, industry–academia collaborations, and student clubs are aligned through outcome-based mechanisms, with data consolidated by faculty specializing in sustainability.These efforts have generated the concrete results shown as follows:

SDG Goal		Courses	Projects	Journal Papers	Conference Papers	Activities /Clubs
1 消除貧窮	No Poverty	161	2	7	7	-
2 消除飢餓	Zero Hunger	96	58	4	3	86
3 良好健康與福祉	Good Health and Well-being	435	128	35	78	89
4 優質教育	Quality Education	2818	191	87	186	219
5 性別平等	Gender Equality	260	3	2	5	3
6 潔淨水與衛生	Clean Water and Sanitation	74	1	2	6	-
7 可負擔的潔淨能源	Affordable and Clean Energy	125	17	28	37	-
8 尊嚴就業與經濟發展	Decent Work and Economic Growth	695	96	37	53	5
9 產業創新與基礎設施	Industry, Innovation and Infrastructure	847	293	88	159	-
10 減少不平等	Reduced Inequalities	191	26	1	6	12
11 永續城市與社區	Sustainable Cities and Communities	275	32	23	36	2
12 負責任的消費與生產	Responsible Consumption and Production	300	47	20	12	17
13 氣候行動	Climate Action	126	46	7	7	27
14 水下生命	Life Below Water	57	1	1	4	9
15 陸域生命	Life on Land	74	4	2	2	10
16 和平正義與有力的制度	Peace, Justice and Strong Institutions	142	3	-	3	10
17 夥伴關係	Partnerships for the Goals	262	20	10	8	19

Note: Each work guideline corresponds to 1–3 SDGs; therefore, no total value is shown. For example, in terms of the number of courses, the total for SDG 1–17 will be greater than the actual number of courses offered.

Overview of Report Content Corres ponding to the SDGs

In the 2024 Sustainability Report, National Formosa University (NFU) presents its annual achievements across six chapters, each mapped to the United Nations SDGs. The University's vision for higher technical and vocational education focuses on cultivating talents with both cross-disciplinary technological competence and positive social influence (aligned with SDG 4: Quality Education). At the same time, NFU is committed to practicing University Social Responsibility (USR), strengthening international and social partnerships (SDG 17: Partnerships for the Goals), and ensuring the health and well-being of all faculty, staff, and students (SDG 3: Good Health and Well-being).

NFU's teaching programs (Chapter 4) and USR projects (Chapter 6) have been fully aligned with the SDGs. Moving forward, NFU will continue to integrate the SDGs into its governance framework, advancing toward the vision of a comprehensive sustainable campus.

SDG Goal	Chapter 1 Sustainability Vision of NFU	Chapter 2 University Governance	Chapter 3 Building a Happy Campus	Chapter 4 Excellence in Teaching and Research	Chapter 5 Environmental Sustainability Performance	Chapter 6 Social Sustainability and Inclusion
No Poverty			✓	✓		✓
Zero Hunger			✓	✓	✓	✓
Good Health and Well-being		✓	✓	✓	✓	✓
Quality Education	✓	✓	✓	✓	✓	✓
Gender Equality		✓	✓	✓		✓
Clean Water and Sanitation				✓	✓	✓
Affordable and Clean Energy				✓	✓	✓
Decent Work and Economic Growth	✓		✓	✓		✓
Industry, Innovation and Infrastructure		✓		✓	✓	✓
Reduced Inequalities			✓	✓		✓
Sustainable Cities and Communities	✓			✓	✓	✓
Responsible Consumption and Production	✓			✓	✓	✓
Climate Action				✓	✓	✓
Life Below Water				✓	✓	✓
Life on Land				✓	✓	✓
Peace, Justice and Strong Institutions	✓	✓	✓	✓		✓
Partnerships for the Goals	✓	✓		✓	✓	✓

1 NFU Sustainability Vision

1-1 History and Organizational Structure

The predecessor of the University was the Yunlin Industrial Junior College, founded in 1980. In its early stage, five departments were established: Mechanical Manufacturing, Mechanical Materials, Mechanical Design, Power Machinery, and Electrical Engineering. In 2004, it was officially restructured into National Formosa University (NFU), with four colleges established simultaneously: Humanities and Sciences, Engineering, Electrical and Computer Engineering, and Management.

Upholding the University motto of "Integrity, Justice, Precision, and Diligence," and under the leadership of successive presidents, including the current President, Professor Shinn-Liang Chang, NFU has always been student-centered. The University is committed to cultivating practical talents who possess interpersonal competence, self-growth capacity, humanistic literacy, global vision, innovative thinking, cross-disciplinary integration, information application, and professional expertise. NFU actively promotes academia–industry collaboration to build a strong foundation of competitiveness for the nation.

Basic Information of National Formosa University

University Name | National Formosa University
Address | No. 64, Wenhua Rd., Huwei Township, Yunlin County 632301, Taiwan (R.O.C.)
President | Dr. Shinn-Liang Chang
Website | https://www.nfu.edu.tw

NFU Website | About the University | Admissions Promotion

Faculty and Staff: Full-time faculty 362 people; Part-time faculty 257 people; 411 people
Students: 11,976 people

Student Retention Rate

Academic Year	Bachelor's Degree Program	Undergraduate Program (In-service)	2-Year Junior College Division	5-Year Junior College Division
111	95.30%	84.96%	97.06%	92.75%
112	91.10%	78.13%	87.50%	98.78%
113	92.72%	83.16%	86.49%	97.75%

Academic Units

- 4 Colleges
- 20 Departments
- 1 Doctoral Degree Program
- 2 Doctoral Programs
- 18 Master's Programs
- 10 In-service Special Master's Programs
- 1 Bachelor's Degree Program
- 1 5-Year Junior College Division (2 Departments)
- 1 2-Year Junior College Division (1 Department)

Historical Development

July 1980 Established as Provincial Yunlin Industrial Junior College with Dr. Tien-Chien Chang as the first President. Five departments were founded: Mechanical Manufacturing, Mechanical Materials, Mechanical Design, Power Machinery, and Electrical Engineering.

July 1981 Reorganized as National Yunlin Industrial Junior College.

1997 Upgraded to National Huwei Institute of Technology; five-year junior college programs were gradually adjusted to two-year and four-year technical programs.

2004 Renamed National Formosa University (NFU) and four colleges were established: Humanities and Sciences, Engineering, Electrical and Computer Engineering, and Management.
2004–2011 – Academic Expansion:
2004: Established the Graduate Institute of Mechanical and Electro-Mechanical Engineering.
2005: Added the Department of Electronic Engineering, the Master's Program in Electrical Engineering, and the Doctoral Program in Optoelectronics.
2006: Established the Graduate Institute of Materials Science and Green Energy Engineering, and the Graduate Institute of Business and Management. The Department of Mechanical Manufacturing Engineering was renamed the Department of Mechanical and Computer-Aided Engineering. The General Education Division and Teacher Education Center were merged into the Center for General Education.
2007: Established the Graduate Institute of Aviation and Electronic Technology, and the Graduate Institute of Creative Design and Precision Technology. The Department of Leisure Business Management was renamed the Department of Leisure and Recreation.
2008: Added Master's Programs in Computer Science and Information Engineering, Automation Engineering, and Biotechnology.
2009: Added Master's Programs in Mechanical Design Engineering and L eisure and Recreation.
2010: Added Master's Programs in Electronic Engineering and Vehicle Engineering.
2011: Added the Master's Program in Finance.

March 2012 Approved by the Executive Yuan to use 17.181 hectares of land in the HSR Huwei Special District for the construction of a new campus.

April 2013 Received funding from the Ministry of Education under the Program for Developing Model Universities of Science and Technology.

2018 Supported by the MOE Higher Education SPROUT Project; reinstated the five-year junior college division with the Department of Precision Mechanical Engineering, and established the Bachelor's Degree Program in Aircraft Maintenance.

2019 Received funding under the MOE Plan to Optimize Practical Training Environments for Technical and Vocational Colleges; established the Department of Agricultural Technology and the Two-Year Program in Electronic Engineering.

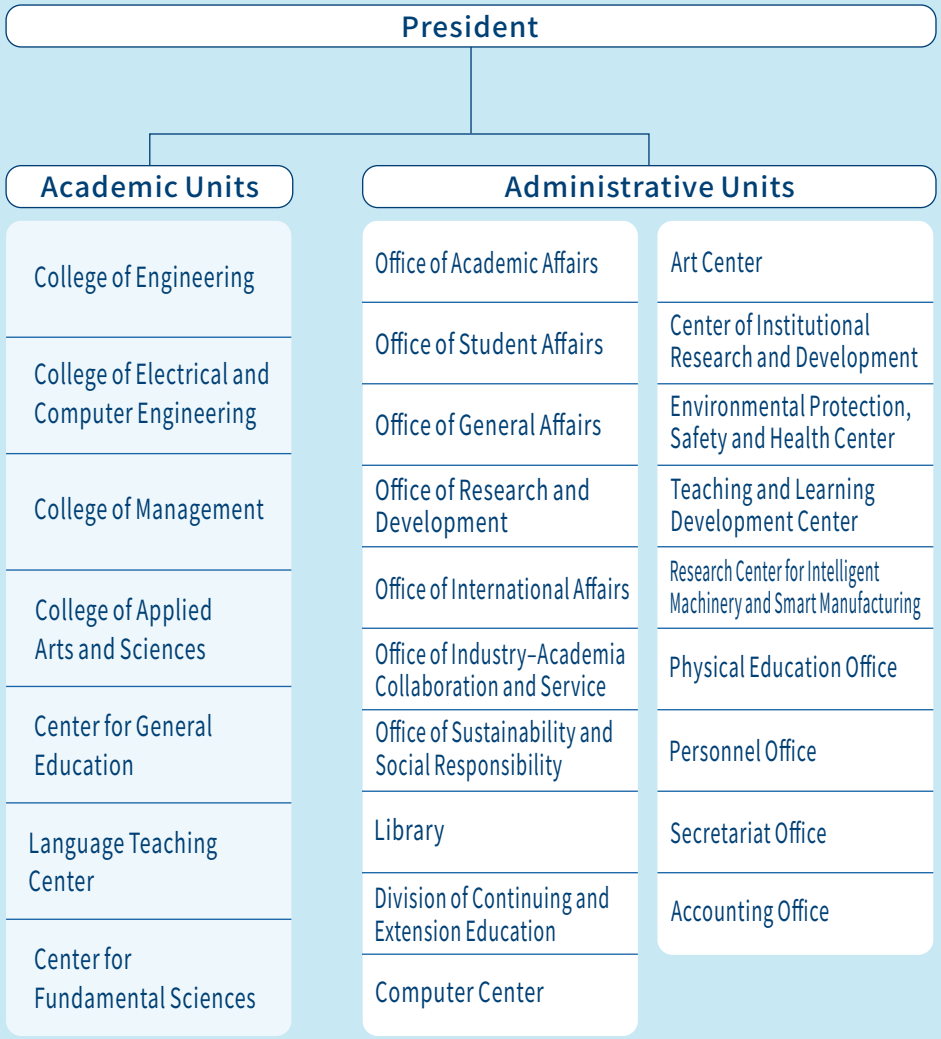
2020 Established the Doctoral Program in Smart Industry Technology R&D; added the Five-Year Junior College Program in Computer Science and Information Engineering.

2021 The College of Engineering launched the Wo-Hu Program.

2022 The College of Management introduced the Smart Innovation Program and the Securities Industry Program.

2024 Established the Center for Fundamental Sciences.

Organizational Structure



Note: The University comprises 4 colleges, 1 education center, and 2 teaching centers responsible for academic and instructional missions.
In addition, 19 administrative units are established to manage the University's administrative affairs.

Academic Units

Schools and Departments of NFU

College	Department
College of Electrical and Computer Engineering	• Department of Computer Science and Information Engineering (including Master' s Program; Five-Year Junior College Program) • Department of Electrical Engineering (including Master' s Program; In-service Special Master' s Program) • Department of Electro-Optical Engineering (including Doctoral, • Master' s, and In-service Special Master' s Programs) • nfu.edu.tw • Department of Electronic Engineering (including Master' s Program; Two-Year Junior College Program)
College of Engineering	• Department of Mechanical and Computer-Aided Engineering (including Master' s Program; In-service Special Master' s Program) • Department of Mechanical Design Engineering (including Master' s Program); Department of Precision Mechanical Engineering (Five-Year Junior College Program) • Department of Power Mechanical Engineering (including Doctoral Program in Mechanical and Electro-Mechanical Engineering, Master' s Program, In-service Special Master' s Program) • Department of Automation Engineering (including Master' s Program) • Department of Materials Science and Engineering (including Master' s Program in Materials Science and Green Energy Engineering, In-service Special Master' s Program) • Department of Vehicle Engineering (including Master' s Program) • Department of Aeronautical Engineering (including Master' s Program – Aeronautical and Electronic Technology division), plus the Aircraft Maintenance Bachelor' s Degree Program • Doctoral Program in Smart Industry Technology Research and Design
College of Management	• Department of Industrial Management (including Master' s Program in Industrial Engineering and Management, In-service Special Master' s Program) • Department of Information Management (including Master' s Program; In-service Special Master' s Program) • Department of Finance (including Master' s Program) • Department of Business Administration (including Master' s Program in Business Administration, Executive Master' s Program)
College of Applied Arts and Sciences	• Department of Applied Foreign Languages • Department of Biotechnology (including Master's Program; In-service Special Master's Program) • Department of Multimedia Design (including Master's Program in Digital Content Creative Industry or similar) • Department of Leisure and Recreation (including Master's Program; In-service Special Master's Program) • Department of Agricultural Technology

Administrative Units

Administrative Units and Subdivisions of NFU

Primary Unit	Secondary Unit(s)
Office of Academic Affair	• Division of Academic Affairs • Division of Teaching Services • Admissions Division
Office of Student Affairs	• Military Training Office • Center for Student Counseling • Student Life Guidance Division • Extracurricular Activities Division • Health and Medical Services Division
Office of General Affairs	• Administrative Division • Documentation Division • Campus Development Division • Cashier Division • Asset & Facility Management Division
Office of Research and Development	• Division of Academic Affairs • Division of Teaching Services • Admissions Division
Office of International Affairs	• International Academic & Cultural Affairs Division • Academic Exchange Division • International Student Affairs Division
Office of Industry–Academia Collaboration & Services	• Innovation & Incubation Center • Intellectual Property & Tech Transfer Division • Technical and Vocational Support Division • Career Development Center

Primary Unit	Secondary Unit(s)
Office of Sustainability & Social Responsibility	• Center for University Social Responsibility Practice • Division of Community Engagement Learning • Sustainability Division
Library	• Information Systems Division • Information Services Division • Audiovisual Materials Division
Division of Continuing and Extension Education	• Teaching Affairs Division • Student Affairs Division • Center for Extension Education
Computer Center	• Information Services Division • Networking Division • System Design Division
Art Center	
Office of Institutional Research and Development	
Environmental Protection, Safety and Health Center	

Primary Unit	Secondary Unit(s)
Center for Teaching and Learning Development	• Faculty Development and Learning Promotion Division • Strategic Planning Division
Research Center for Intelligent Machinery and Smart Manufacturing	
Physical Education Office	• Division of Physical Education Instruction • Division of Sports Activities • Facilities and Equipment Division
Secretariat Office	• General Affairs Division • Public Affairs Division
Personnel Office	
Accounting Office	• Section One • Section Two • Section Three


First Teaching Area


Sports Area


Second Teaching Area


Dormitory Area


Third Teaching Area


High-Speed Rail New Campus

1-2 University Development Blueprint

SDGs 4、8、16、17

SDGs Target(s) 4.3、4.4、4.7、8.2、8.5、8.6、16.b、17.14

The University envisions "Moving Toward an Exquisite and Excellent University of Technology with i-Best" as its development vision. Guided by four major pillars—talent cultivation, campus culture and environment, research development, and university administration—NFU has formulated a comprehensive development blueprint. Through this management model, the University aims to establish distinctive features and strengthen competitiveness, expand institutional advantages, and fulfill its social responsibility. At the same time, NFU is dedicated to cultivating students with strong potential for future development in order to meet emerging trends and severe challenges.

Philosophy and Vision

Philosophy

i-Best(innovation,Base, environment, student, teacher)

Vision

Moving Toward an Exquisite and Excellent University of Technology

- Student-centered: Actively build a high-quality learning and living environment.
- Adjust the institutional structure and development strategies to enhance the University's sustainability and competitiveness.
- Integrate the SDGs into development goals and fulfill social responsibility.
- Promote industry–academia–research collaboration and division of work to drive regional and local economic development.

University Sustainability Development Goals

Talent Cultivation

Promote excellence in teaching and holistic student counseling; enhance students' global perspectives.

Campus Culture and Environment

Develop an artistic and high-quality campus; prioritize the development and rights of faculty and students.

Research Development

Pursue academic excellence; promote industry–academia collaboration and cooperative education.

University Administration

Strengthen institutional regulations; fully digitalize university administration; ensure transparent and open financial management.

University Development Strategies

Strengthen key fields and foster cross-disciplinary talent.	Fulfill USR and build a strong university image.
Support learning, employment, and entrepreneurship.	Upgrade smart machinery and manufacturing.
Expand international exchange and enhance competencies.	Aviation Maintenance Training Center (AMTC).
Promote practical industry–academia–research collaboration.	Advance institutional research and the i-Best campus.

Five Dimensions of University Development : Action Plans and Indicators

Across these five dimensions with eight key performance indicators.

Philosophy and Vision

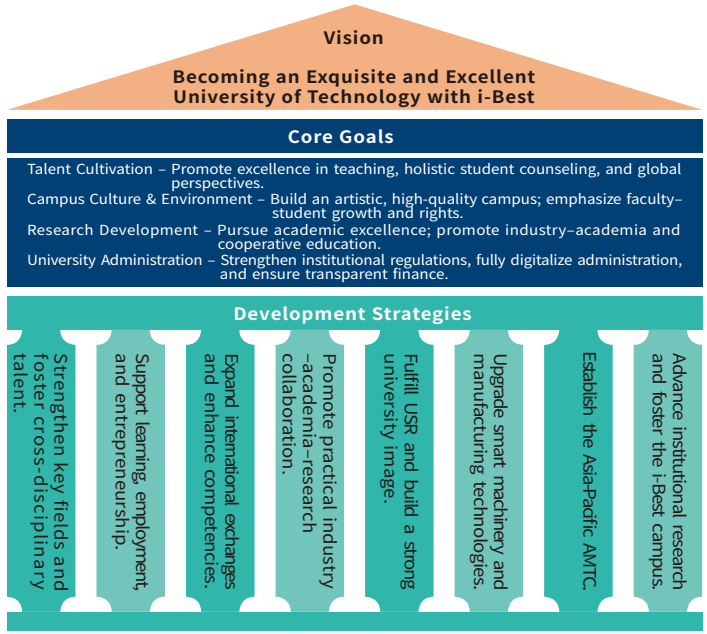
response to evolving higher education challenges and social expectations, the University adopts the i-Best philosophy (innovation, Base, environment, student, teacher). NFU aims to deepen practical education, strengthen industry linkages, expand its advantages, fulfill social responsibility, and cultivate students with strong future potential.

NFU is committed to nurturing cross-disciplinary technological talents with positive impact, guided by the motto "Integrity, Justice, Precision, and Diligence." Centered on students, the University develops practical professionals with eight core competencies: interpersonal skills, self-growth, humanistic literacy, global mobility, innovation, cross-disciplinary integration, information literacy, and professional expertise—thereby advancing industry–academia collaboration and enhancing national competitiveness.

NFU envisions "Becoming an Exquisite and Excellent University of Technology with i-Best," striving for outstanding performance in innovation, foundational strengths, campus environment, students, and faculty.

University Sustainability Development Goals and Strategies

To address future challenges and cultivate students who meet societal needs, NFU has defined four main goals and strategic frameworks, as illustrated in the figure.

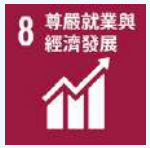


◉Four Core Goals and Development Strategies

Talent Cultivation	Campus Culture & Environment	Research Development	University Administration
Excellence in teaching, holistic counseling, global outlook	Artistic, high-quality campus; focus on faculty–student development and rights	Academic excellence; industry–academia and cooperative education	Sound regulations, full digitalization, financial transparency
1. Strengthen industry-linked education, core technical skills, and creativity; adjust curricula and programs; build a quality learning environment. 2. Expand global industry–academia cooperation; establish dual-degree programs with foreign universities; leverage the new HSR campus to attract international students. 3. Ensure teaching quality and safeguard student learning outcomes.	1. Create a supportive teaching and research environment for both students and faculty. 2. Expand facilities, enrich library and e-resources, and promote an artistic campus to enhance learning and campus life. 3. Balance efficiency and finance with traditional values of cohesion, honor, and dedication.	1. Strengthen research in key areas to build academic excellence. 2. Promote international academic exchange and forward-looking technology research aligned with industry trends. 3. Integrate resources across colleges; form cross-disciplinary research teams to enhance overall R&D capacity.	1. Enhance professionalism in governance; update and improve regulations and systems. 2. Promote e-administration, streamline processes, and improve service efficiency. 3. Ensure transparent financial management; optimize budget use and expand university funds.

Five Dimensions of University Development in Line with the UN SDGs and Taiwan's Core Sustainability Goals

Through the i-Best innovative industry–academia campus, NFU advances five development dimensions to realize a smart campus and smart learning. These include Innovation, Base, Environment, Student, and Teacher, aligned with the UN SDGs and Taiwan's key sustainability goals, as shown in the table below.

Five Dimensions	innovation	Base	environment	student	teacher
Content	Promote digital transformation thinking, innovative curricula, and research mechanisms. Strengthen featured programs, align with social needs, and enhance public service effectiveness.	Build strong foundational features, develop industry-linked teaching materials, and enhance students' employability and general knowledge. Expand academic functions, upgrade industry, broaden exchanges, and establish the "Tiger Brand" to anchor the University in the community.	Expand campus infrastructure and smart applications. Build a high-quality and innovative campus, enhance energy conservation and environmental sustainability, and leverage high-speed rail campus advantages to boost industry–academia collaboration and exchanges.	Provide comprehensive academic and career support from enrollment to employment. Enhance student welfare and education quality, enrich campus life, and strengthen student engagement and interaction. Cultivate future leaders and enable positive social mobility.	Expand faculty recruitment channels, create recognition and reward mechanisms, and optimize faculty distribution. Provide opportunities for professional growth, research, and international exchange. Enhance teaching quality and promote national and global academic collaboration.
UN SDGs					    
Taiwan's Core Sustainability Goals	**Core Goal** Strengthen social and economic security services for disadvantaged groups.	**Core Goal** Ensure food security, eliminate hunger, and promote sustainable agriculture.	**Core Goal** Ensure inclusive, equitable, and quality education; promote lifelong learning.	**Core Goal** Ensure environmental quality and sustainable resource management.	**Core Goal** Promote inclusive and sustainable economic growth, improve labor productivity, and ensure decent work for all.	**Core Goal** Build inclusive, safe, resilient, and sustainable cities and communities.	**Core Goal** Promote a green economy and ensure sustainable consumption and production.	**Core Goal** Strengthen mitigation and adaptation actions to address climate change and its impacts.

High-Speed Rail Campus

Under the dual transformation of both quality and quantity, continues to grow steadily. To meet the challenges of future international competition and with strong local support, the University successfully acquired 17.181 hectares of land from the Ministry of National Defense (former Air Force Huwei Base) free of charge, enabling the development of the High-Speed Rail Campus with an international perspective and modern scale. This initiative marks an important step toward building a high-quality environment for technological and vocational education.

The High-Speed Rail Campus is positioned as a hub integrating talent cultivation, innovative research and development, industry–academia collaboration, and international connections. Its vision is built upon four core concepts: Expanding emerging industry linkages, Practicing local symbiosis, Unleashing creative potential, and Promoting international exchange. To realize this vision, five functional orientations have been planned: Talent cultivation balancing humanities and technology, International research and academic exchange, Global industry–academia collaboration and cultural knowledge sharing, Integration of creative design and practical training, and Dormitory and leisure spaces combining aesthetics with quality living functions.

The total planned budget for establishing the High-Speed Rail Campus is NT$991 million, with NT$820 million allocated for Phase I construction, which is expected to be completed and officially operational by the end of 2025.
Anticipated Benefits:

1. Enhance the quality of teaching and research, while advancing internationalization.
2. Generate value through the “regional knowledge economy” effect, driving local development.
3. Strengthen regional human resources and promote economic growth.
4. Boost industrial clustering synergy for the Huwei Base of the Central Taiwan Science Park.
5. Increase the effective utilization and development value of land in the HSR Yunlin Station Special District.

High-Speed Rail Campus Construction Progress (January 2025)

1-3 Sustainability Goals and Strategies

SDGs 4、11、12、16、17

SDGs Target(s) 4.7、11.3、11.a、12.6、16.b、17.14

To concretely implement the United Nations Sustainable Development Goals (SDGs) and balance the three major dimensions of environment, society, and governance (ESG), NFU has formulated the following sustainability goals and strategies::

Strategies

External

Serve as a regional think tank in Yunlin, connecting with domestic and international SDG-related organizations to promote co-creation across local communities, industries, and global partners.

Internal

Strengthen USR faculty–student teams and foster cross-campus connections on SDG-related issues.

Goals

1 Formulating the Axes of Sustainability and Social Practice

- Align with and assess local characteristics and needs.
- Plan development indicators in accordance with the UN SDGs.
- Establish NFU's main axes and strategies for USR development.

2 Supporting Sustainability- and Social Responsibility –Related Teaching and Research

- Promote innovative, cross-disciplinary teaching and integrated sustainability curricula across colleges and departments.
- Encourage innovative project proposals for social practice, including faculty-led and student-led applications.
- Empower faculty communities in social practice through regular expos, seminars, and internship activities.

3 Integrating Administrative Resources for Sustainable Development

- Optimize incentive mechanisms: promotion opportunities and recognition awards for excellence in USR teaching.
- Advocate for campus sustainability: coordinate and advance university-wide sustainability and social responsibility initiatives.
- Promote sustainability issues: empower both administrative and academic units to implement SDG indicators and publish the University's annual Sustainability Report.

Concrete Practices for Promoting Sustainability

1 Establishment of the Office of Sustainability and Social Responsibility

To effectively implement sustainability strategies, NFU set up the Preparatory Office of Sustainability and Social Responsibility in March 2022, and officially launched the Office of Sustainability and Social Responsibility in August of the same year. NFU became the first university in Taiwan to establish such an office as a primary administrative unit. The Office oversees three divisions: Center for University Social Responsibility (USR), Division of Community Engagement Learning, and Sustainability Division. The Office coordinates related affairs, promotes the UN Sustainable Development Goals (SDGs), and advances University Social Responsibility (USR), addressing the three ESG dimensions of Environment (E), Society (S), and Governance (G) to concretely realize the 17 SDGs.

2 Establishment of the Sustainability and Social Responsibility Promotion Committee

In 2023, NFU established the Sustainability and Social Responsibility Promotion Committee, chaired by the President, with the Director of the Office of Sustainability and Social Responsibility serving as Executive Secretary. Members include the Vice Presidents, Chief Secretary, first-level administrative directors, Deans of Colleges, representatives of the Student Association and Student Congress, along with four external experts and scholars in sustainability as advisory members.
The committee held its first meeting in 2024 to review the 2023 Sustainability Report. Its responsibilities include:

1. Formulating sustainability and social responsibility goals and strategies.
2. Designing sustainability and social responsibility support systems.
3. Reviewing and approving the University's annual Sustainability Report.
4. Providing recommendations on major matters related to sustainability and USR development.

3 University Social Responsibility (USR)

1 MOE Phase III USR Projects

- Sustainability-Oriented Flagship Project: "Agricultural Co-Learning, Local Revitalization, and Shared Value Creation—From Green Heart to Green Port"
- University Feature Sprout Project: "Blooming Huwei, Sustainable Inclusion"

2 USR Hub Projects

- Meta-Toy: Blockchain-based co-creation for empathetic education in Yunlin
- Cultural Regeneration Action of New Immigrant Women in Yunlin
- Community Co-Prosperity Practice in Coastal Rural Yunlin
- University Energy Enters the Community – Revitalizing Dou-Nan Village Warehouses
- Yun-Yao Advancement for Higher Education – Twin Bean Win Model in Agri-Food Production and Marketing
- Establishing Sustainable Soil and Local Eco-Friendly Farming Systems

3 Higher Education Sprout Project – Goal 2 (Social Responsibility)

- oYunlin Action Think Tank – Sustainable Coexistence in the Huwei River Basin

NFU Sustainability Reports and Achievements

Promotional Video

1-4 Stakeholder Engagement

SDGs 16、17

SDGs Target(s) 16.7、17.17

Stakeholders are groups that influence NFU or are affected by NFU. In identifying stakeholders, the University referred to the AA1000 Stakeholder Engagement Standard (2015) and, based on the functions of administrative and academic units, selected stakeholder categories with frequent interactions. Through internal discussions, NFU identified ten key stakeholder groups with high relevance to the University: current students, parents, faculty, staff, community members, alumni, enterprises, government agencies, non-governmental organizations (NGOs), and suppliers/contractors.

NFU values diverse perspectives and maintains strong engagement with all stakeholder groups by providing appropriate communication channels. This ensures that stakeholders can raise questions or provide suggestions, which the University can receive promptly and respond to in a timely manner, thereby allowing stakeholders to have a clear understanding of the University's operations.

Stakeholder Communication Channels and Frequency

Stakeholder	Significance to NFUCommunication	Channels	Frequency
Current Students	NFU's educational mission follows the motto Integrity, Justice, Precision, and Diligence, focusing on students and cultivating practical professionals needed by society.	• University website	Anytime
		• Unit email addresses	Anytime
		• Student appeals	Anytime
		• Advisor office hours	Irregular
		• University Council	At least once per semester
		• Satisfaction surveys	Once per semester
		• Teaching evaluations	Once per semester
		• Campus APP“Feedback”	Anytime
		• “Meeting with the President”	Once per academic year
		• Student Rights Assembly	Once per academic year
		• Dormitory/off-campus housing meetings	Once per semester
Parents	Parents are key partners in the educational process. NFU maintains communication mechanisms to ensure parents understand its philosophy and work together for their children's education.	• University website	Anytime
		• Unit email addresses	Anytime
		• Department-level freshman parent meetings	Once per academic year
		• University-wide parent meetings	Once per academic year
Faculty	Faculty play a vital role in teaching and research. NFU maintains a two-way partnership, providing support systems, training, evaluation, and promotion to build a quality environment.	• Faculty appeals	
		• University Council	
		• Administrative meetings	Monthly (during semesters)
		• Faculty advisor meetings	At least once per semester
		• Faculty evaluation committees	least once per semester
		• Faculty evaluation	Once every three years
Staff	Staff are crucial to administration. NFU maintains a two-way partnership, offering support, training, evaluation, and promotion to foster a quality environment.	• Staff appeals	Anytime
		• University Council President's meetings	At least once per semester
		• Labor-management meetings	Once per year
		• Performance evaluation committees	Quarterly
			Irregular

Stakeholder	Significance to NFUCommunication	Channels	Frequency
Community Members	NFU fulfills its University Social Responsibility (USR) by engaging with the community through activities, services, and building inclusive regional ties.	• University website	Anytime
		• Unit email addresses	Anytime
		• Dormitory/off-campus housing meetings	Irregular
Alumni	Alumni contribute to employment, innovation, and enhancing NFU's reputation. The University maintains strong ties with alumni through dedicated channels.	• University website	Anytime
		• Unit email addresses	Anytime
		• Alumni information platform	Anytime
		• Graduate tracking surveys	Once per year
Enterprises	Enterprises are key partners for innovation, research, and internships. NFU builds close cooperation for industry–academia collaboration and student opportunities.	• University website	Anytime
		• Unit email addresses	Anytime
		• Employer satisfaction surveys	Irregular
		• Office of Industry–Academia	Anytime
		• Dormitory/off-campus housing meetings	Anytime
		• Office of R&D	Anytime
Government Agencies	Government plays a critical role in supporting education, providing resources, and promoting academic, regional, social, and technological progress.	• University website	Anytime
		• Teaching evaluations	Irregular
		• Professional accreditation	Irregular
		• Public hearings, consultation meetings, briefing sessions	Irregular
NGOs	NGOs drive social welfare and specific issues. Collaboration with NGOs helps NFU better respond to social needs.	• University website	Anytime
		• Unit email addresses	Anytime
Suppliers / Contractors	Cooperation with suppliers ensures smooth operations and effective use of resources.	• University website	Anytime
		• Unit email addresses	Anytime
		• Office of General Affairs	Anytime

1-5 Identification of Material Topics

To highlight the issues with significant impacts on the economic, environmental, and social dimensions of NFU, the University conducted materiality identification in accordance with the GRI 3: Material Topics 2021, as issued by the Global Sustainability Standards Board (GSSB).

Step 1 Understand Organizational Context & Identify Sustainability Issues

Collecting school activities and understanding the sustainability context:
By referring to NFU's medium- and long-term development plans, annual performance reports, the United Nations Sustainable Development Goals (SDGs), and sustainability reports from the University and enterprises, a total of 23 sustainability issues related to university governance, environmental, and social dimensions were compiled.

Identifying stakeholders:
Based on the AA1000 SES 2015 stakeholder engagement standard, NFU identified 10 categories of stakeholders: current students, parents, faculty, staff, community members, alumni, enterprises, government agencies, NGOs, and suppliers/contractors.

Step 2 Assess the Impact of Sustainability Issues

Stakeholder concern survey and analysis:
A questionnaire survey was conducted among the 10 stakeholder groups to assess their level of concern for sustainability issues, yielding 427 valid responses.

Assessing NFU's impact on sustainability issues:
Through administrative meetings, NFU's administrative and academic supervisors completed evaluation questionnaires to assess the positive and negative impacts of sustainability issues on operations. In total, 22 supervisors provided assessment opinions.

Ranking the impact of sustainability issues:
Based on the results from both stakeholders and internal supervisors, an analysis was conducted. A materiality matrix was created using the two dimensions of “stakeholder concern regarding sustainability issues” and “the significance of NFU's operational impact on these issues.”

Step 3 Determine Material Topics

Confirming material topics:
The Sustainability Committee was convened to confirm NFU's 2024 material topics. The principle was that each of the three dimensions—governance, environment, and society—must include at least two material topics.

Management of material topics:
A material topic list was established, describing the impacts, actions taken, and linkages to the content of the Sustainability Report.

NFU Sustainability Issues

School governance and sustainable management; operational performance; academic and integrity ethics; procurement and supply chain management; teaching quality and learning outcomes; research and industry–academia achievements; student counseling and support; student internships and career guidance; information security

Climate change adaptation measures; energy management (energy conservation and renewable energy); natural ecological resources; environmental sanitation management; environmental education; waste management; water resource management

International exchanges and global partnerships; University Social Responsibility (USR) practices; community engagement and social welfare; gender equality and human rights; campus safety management; talent attraction and retention; faculty and staff career development and training

Stakeholder Concerns

Through the “NFU Sustainability Report Questionnaire”, ten stakeholder groups were surveyed on their level of concern regarding NFU's sustainability issues to understand the University's potential impacts on the environment and society. A total of 427 valid responses were collected. The stakeholder concerns are summarized as follows:

Stakeholder	Key Concerns
Current Students	Campus safety management; gender equality and human rights; energy management (energy conservation and renewable energy); environmental sanitation management; climate change adaptation measures
Parents	Student counseling and support; environmental education; talent attraction and retention; student internships and career guidance; campus environment and ecological conservation; environmental sanitation management; campus safety management
Faculty	Student counseling and support; teaching quality and learning outcomes; school governance and sustainable management; operational performance; research and industry–academia achievements; campus environment and ecological conservation; community engagement and social welfare; faculty career development and training
Staff	Faculty career development and training; information security; gender equality and human rights; student counseling and support; campus safety management; campus environment and ecological conservation; school governance and sustainable management
Community Members	Climate change adaptation measures; environmental education; energy management (energy conservation and renewable energy); teaching quality and learning outcomes; water resource management

利害係人	注
Alumni	University Social Responsibility (USR) practices; community engagement and social welfare; waste management; teaching quality and learning outcomes; climate change adaptation measures; energy management (energy conservation and renewable energy)
Enterprises	Teaching quality and learning outcomes; research and industry–academia achievements; environmental sanitation management; University Social Responsibility (USR) practices; community engagement and social welfare; academic and integrity ethics; gender equality and human rights; campus safety management; talent attraction and retention
Government Agencies	Teaching quality and learning outcomes; research and industry–academia achievements; environmental sanitation management; University Social Responsibility (USR) practices; community engagement and social welfare; academic and integrity ethics; gender equality and human rights; campus safety management; talent attraction and retention
NGOs	University Social Responsibility (USR) practices; community engagement and social welfare; student internships and career guidance; campus safety management
Suppliers/ Contractors	Operational performance; academic and integrity ethics; teaching quality and learning outcomes; research and industry–academia achievements; student internships and career guidance; information security; energy management

Ranking of Sustainability Issues by Impact

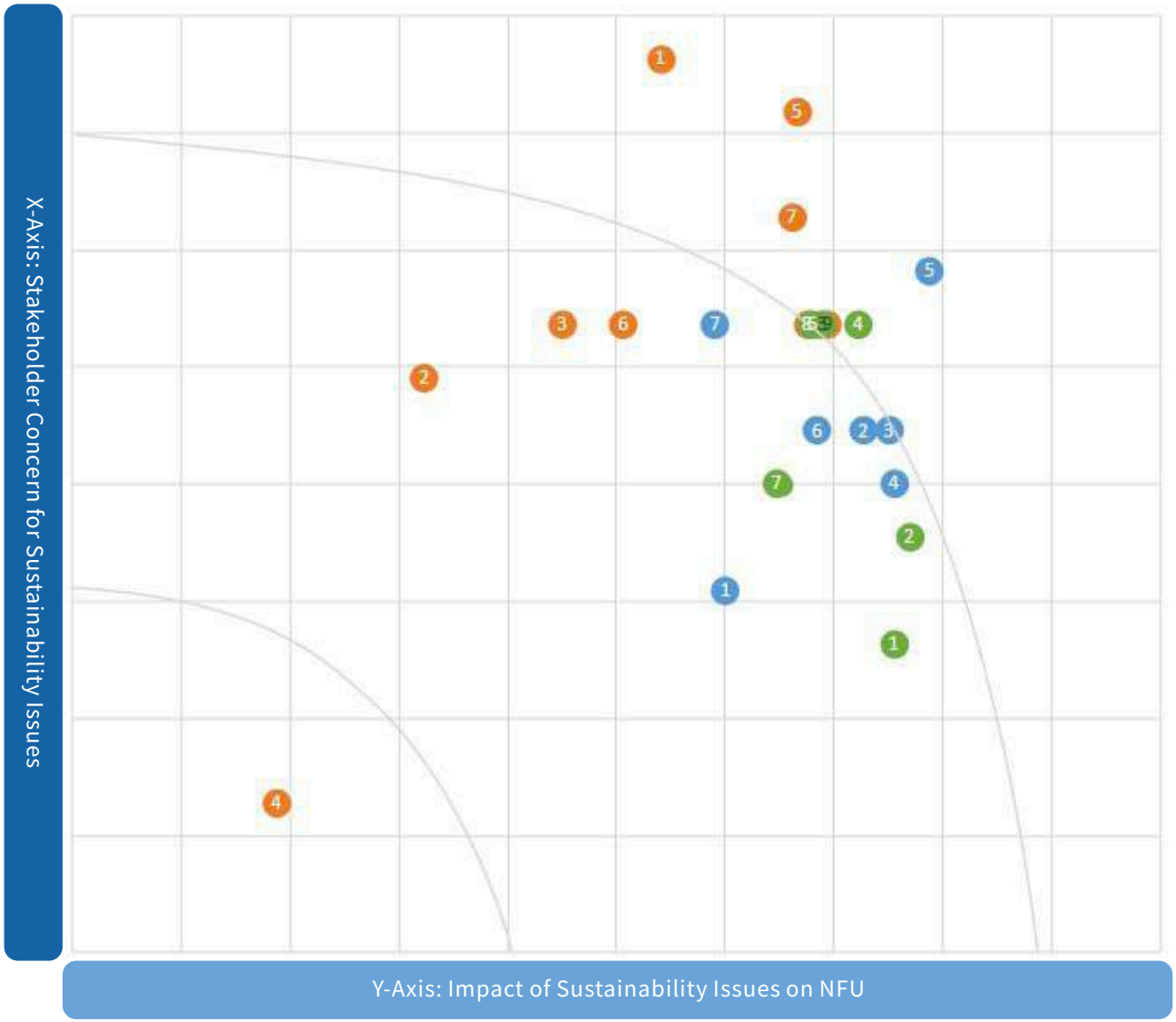
Based on analyses of survey results from stakeholders and NFU supervisors, a materiality matrix was developed using two dimensions: (1) the level of stakeholder concern regarding sustainability issues (reflecting the University's impact on the economy, environment, and society), and (2) the level of importance assigned by University supervisors to these issues (reflecting the impact of the external environment on University operations). Through resolutions made by the Sustainability and Social Responsibility Promotion Committee, NFU identified nine material topics. Among these, the top three issues in each of the three dimensions—governance, environment, and society—were selected as the University's material topics.

1 School governance and sustainable management
2 Operational performance
3 Academic and integrity ethics
4 Procurement and supply chain management
5 Teaching quality and learning outcomes
6 Research and industry–academia achievements
7 Student counseling and support
8 Student internships and career guidance
9 Information security

1 Climate change adaptation measures
2 Energy management (energy conservation and renewable energy)
3 Natural ecological resources
4 Environmental sanitation management
5 Environmental education
6 Waste management
7 Water resource management

1 International exchanges and global partnerships
2 University Social Responsibility (USR) practices
3 Community engagement and social welfare
4 Gender equality and human rights
5 Campus safety management
6 Talent attraction and retention
7 Faculty and staff career development and training

Materiality Analysis Matrix



NFU Material Topics and Management Approaches

In 2024, NFU identified nine material topics, namely: school governance and sustainable management, teaching quality and learning outcomes, student counseling and support, environmental sanitation management, waste management, natural ecological resources, campus safety management, community engagement and social welfare, and faculty career development and training.The following table summarizes the material topics. Detailed management policies are described at the beginning of each corresponding chapter.

Material Topic	Corresponding GRI	Importance to NFU	Management Approach (Report Reference)
School Governance and Sustainable Management	GRI 2-22、23、24、25	NFU's medium- and long-term development plans align with sustainability trends, formulating a vision, goals, and strategies to establish precise and empowering sustainability actions.	Ch.1, Ch.2 (Sec. 1-2, 1-3; Sec. 2-1, 2-2)
Teaching Quality and Learning Outcomes	Custom Topic	Ensuring quality education by strengthening basic competency indicators and assessment mechanisms; improving teaching and student outcomes through innovative pedagogy and SDG-integrated curricula.	Ch.4 (Sec. 4-2)
Student Counseling and Support	Custom Topic	Providing holistic care and assistance to support students' daily lives, behaviors, interpersonal relations, psychological adjustment, and values, enabling healthy growth, campus adaptation, sound character, and responsibility.	Ch.3 (Sec. 3-3)
Environmental Sanitation Management	GRI403	Promoting eco-friendly campus living, fostering energy conservation, frugality, cherishing resources, and waste reduction; actively maintaining a healthy campus and surrounding environment.	Ch.3, Ch.5 (Sec. 3-4; Sec. 5-1)
Waste Management	Custom Topic	Managing general waste (daily garbage) and hazardous industrial waste (from labs/practices) through proper classification, storage, and disposal to avoid pollution and risks to faculty and students.	Ch.5 (Sec. 5-1)
Natural Ecological Resources	Custom Topic	New campus development complies with EIA commitments, preserving biodiversity, while USR projects promote local agricultural sustainability and ecological conservation in Yunlin.	Ch.5 (Sec. 5-1)
Campus Safety Management	GRI403	Conducting safety, health, and environmental training along with health services and activities to ensure a safe campus environment for faculty, students, and community members.	Ch.3 (Sec. 3-4)
Community Engagement and Social Welfare	GRI413	NFU has long supported local revitalization. Through the vision of “Co-presence with the Community,” NFU established the “Yunlin Action Think Tank” to address local issues, foster shared development, and enhance social welfare.	Ch.6
Faculty Career Development and Training	GRI401、405	Supporting faculty in enhancing professional competence, adapting to educational changes, and developing career potential through diverse training and learning opportunities, strengthening education quality, organizational effectiveness, and personal achievements.	Ch.2, Ch.3, Ch.5 (Sec. 2-5; Sec. 3-4; Sec. 5-1)

2 University Governance

Material Topic Management

Facing	University Governance
Significant	School Governance and Sustainable Management
Corresponding To Gri Criteria	GRI 2-22、23、24、25
Corresponding Sdgs	
Policy And Commitment	NFU's medium- and long-term university development plan aligns with sustainability trends, setting the vision, goals, and strategies for sustainable development to establish precise and empowering sustainability actions.
Target	1. Talent cultivation – promoting excellence in teaching, holistic student counseling, and strengthening students' global perspectives. 2. Campus culture and environment – developing a high-quality and arts-oriented campus, while prioritizing the growth and rights of faculty and students. 3. Research development – pursuing academic excellence and promoting industry–academia and cooperative education partnerships. 4. University administration – enhancing institutional regulations, advancing digitalized administration (e-governance), and ensuring transparency in financial management.
Complaint Mechanism	• University Council • “Meet with the President” and presidential forums • NFU Quick Service Platform::https://personnel.nfu.edu.tw/ezfiles/8/1008/img/312/index.htm
Actions And Results	•NFU's Medium- and Long-term University Development Plan (Academic Years 2024–2030) has been published on the Center for Institutional Research and Development website: https://cird.nfu.edu.tw/cird/2021-12-01-09-12-16 •Since 2023, NFU has published its Sustainability Report, available on the Office of Sustainability & Social Responsibility website: https://ossr.nfu.edu.tw/news.php?pa=getAchievementList

2-1 University Operations

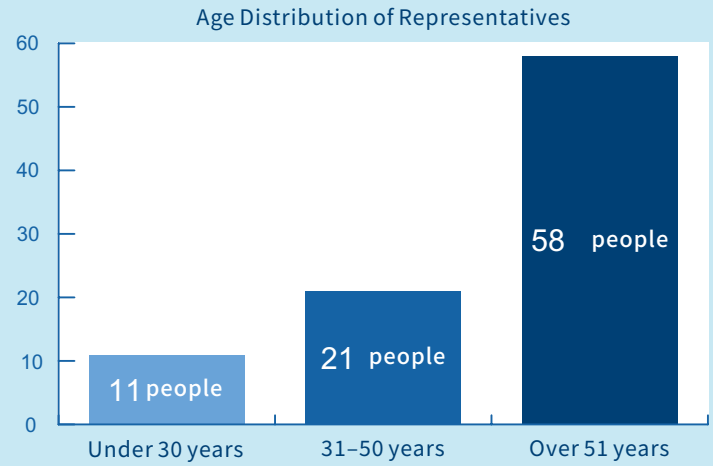
SDGs 4、5、16、17

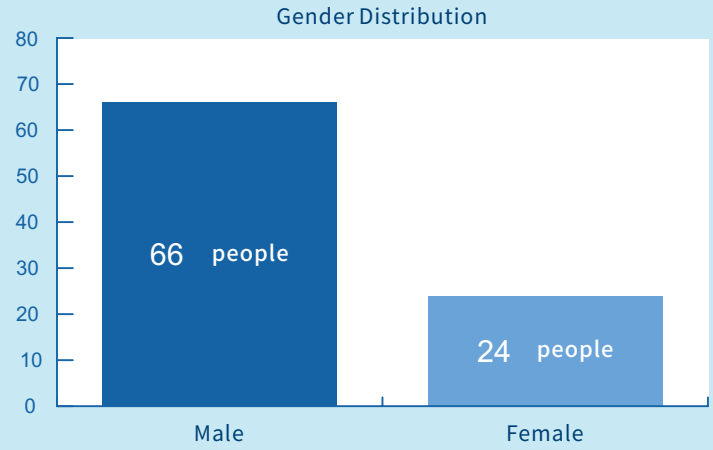
SDG Target(s) 4.3、4.4、5.5、16.6、17.17

NFU has established the University Council in accordance with Article 31 of the University's organizational regulations. The Council is responsible for making decisions on major university affairs and is composed of the President, Vice Presidents, faculty representatives, academic and administrative supervisors, research staff representatives, staff representatives, student representatives, and other relevant members.

◉ In 2024, a total of three University Council meetings were held, with the following key resolutions:

1. Approval of the University Fund Performance Report for Academic Year 2023 (AY112).
2. Approval of the renaming of the Department of Biotechnology to the Department of Environmental Science and Biotechnology, the construction plan for the Basketball Arena, and the addition of a Smart Agriculture Environmental Control Teaching and Practice Greenhouse for the Department of Agricultural Technology.
3. Approval of the reappointment of President Shinn-Liang Chang.
4. Approval of the University's Medium- and Long-term Development Plan (AY2024–2030).
5. Approval of the University's Financial Planning Report for Academic Year 2025 (AY114).





University Affairs Development Symposium

NFU organizes an annual University Affairs Development Symposium. The theme for Academic Year 2023 (AY112) was “Deepening the Cultivation of Technological Talent and Building a Smart and Sustainable Campus.” The symposium was led by the President and attended by NFU colleagues, with invited speakers including Mr. Wen-Kai Tsai, Section Chief of the Admissions Division; Honorary Professor Yu-Long Su of National Chi Nan University's USR team; Professor Yung-Bin Tsai; Director Ku-Fan Chen; and Ms. Yu-Hui Yang, Director-General of the Department of Technological and Vocational Education, Ministry of Education. These experts shared their valuable experiences and insights.

Honorary Professor Su provided an overview of the USR project, from its pilot phase through subsequent stages. Professors Tsai and Chen presented on the theme “The Green Shuili–Nantou Sustainable Value and Talent Cultivation Upgrade Project: Technology × Circular Economy × Net Zero.” Their presentation was divided into five parts: “Introduction to the USR Project,” “Sustainable Practices in Puli's Smart Bamboo Shoot Industry,” “Water and Ecology Axis,” “Water Environment Education Axis,” and “Cross-university and International Collaboration.” They showcased Chi Nan University's USR achievements, beginning with reflections on the aftermath of the 921 Earthquake and the relocation of classes to National Taiwan University, which created social distance from local residents. The discussion emphasized building coexistence and co-prosperity with local communities, aligning with local needs, and narrowing focus on sustainable agricultural development.

Concrete results included improving water and energy use efficiency to reduce environmental impacts, enhancing water safety, and applying AIoT technologies to address agricultural water shortages under extreme climate conditions. Additional efforts included cloud-based programming updates to lower PLC maintenance costs, supporting local industries to generate green economy opportunities.

The USR project of Chi Nan University focused on the sustainability of the Shuili–Nantou region and embodied the Satoyama spirit. Case studies included ecological practices in Taomi and Wugong communities, long-term ecological conservation, training of local ecological conservation talent, butterfly monitoring, and habitat restoration for species that had disappeared for more than a century. These initiatives highlighted the role of universities as educators and protectors of water and community development, producing tangible outcomes for environmental stewardship.

Director-General Yang emphasized that universities should strengthen Institutional Research (IR) systems to track graduate performance and employment outcomes as feedback for teaching improvement, curriculum design, and talent cultivation. She suggested that NFU should analyze and address student attrition, integrate industry–academia collaboration through base projects and production line models, and develop distinctive features. She proposed smart machinery combined with Yunlin's agriculture as a promising direction, where NFU could help address local labor shortages.

She further stressed that social responsibility should not be limited to the Ministry of Education's USR program but should also reflect each university's unique role. Examples include offering special joint programs with industries and 5+2 (five-year junior college + two-year technical college) programs to cultivate urgently needed talent. She encouraged NFU to continue balancing consensus building, academic restructuring, curriculum development, and social responsibility to strengthen its unique position.

The symposium, guided by Ministry of Education officials, partner universities, and NFU's leadership team, combined quantitative data with practical case studies. It enabled participants to better understand environmental changes while inspiring deeper reflection and exploration. The insights and expertise shared challenged conventional thinking, opened new perspectives, and provided valuable guidance for both professional and personal growth. These outcomes offered effective recommendations and solutions for NFU's university affairs and project operations, contributing significantly to the University's future development.

Participation in Associations and Organizations

To foster reciprocal resource sharing and establish friendly alliances with various partners, NFU actively participates in external organizations. Through organizational interaction, NFU exchanges the latest information and experiences to enhance institutional quality and teaching standards. Recent participations are listed below:

Organizations in Which NFU Participates

Organization	Membership Status
Changhua-Yunlin-Chiayi University Alliance	Board Member
Central Taiwan Technical and Vocational Colleges Intercollegiate Alliance	Member
Taiwan Green University Alliance	Member
Taiwan Taichung Software Park Industry–Academia–Training Alliance	Alliance School
Yunlin National University Alliance	Alliance School
Yunlin Government–Academia–Medical Collaboration Platform	Alliance School
Taiwan National University Alliance	Alliance School
Southern Taiwan Science Park Industry–Academia Association	Board Member
Association of National Universities of the Republic of China	Board Member
Association of National Universities of Science and Technology, ROC	Board Member
Agricultural Science Park Industry–Academia Association, ROC	Member
Association of University Arts and Culture Centers, ROC	Member
Taiwan Association for Higher Education	Member
Central Taiwan Science Park Industry–Academia–Training Association	Supervisor
Taiwan Industry–Academia Advancement Association	Member

Organization	Membership Status
International Association for Innovation and Entrepreneurship Development	Board Member
Taiwan Society of Precision Engineering	Member
Phi Tau Phi Scholastic Honor Society	Member
Society of Theoretical and Applied Mechanics, ROC	Member
Library Association of the Republic of China	Member
Chinese Society of Mechanical Engineers	Member
Chinese Institute of Engineers	Member
Taiwan Science Park Industries Association	Member
Chinese Institute of Engineering Education	Member
Taiwan Unmanned Aerial Vehicle Development Association	Member
Chiayi County Asia UAV Innovation Park Association	Member
Chinese Institute of Engineering Education	Member
Taiwan e-Security Analysis and Management Association (ESAM)	Member
Chinese Institute of Engineering Education (IEET)	Board Member

2-2 Risk Management and Internal Control

SDGs 16

SDG Target(s) 16.6

In response to a rapidly changing environment, NFU has reviewed the strengths, weaknesses, opportunities, and threats encountered in the process of institutional development, and has conducted a comprehensive SWOT analysis for the University's overall development. The results of this analysis have been incorporated into the University's Medium- and Long-term Development Plan to formulate corresponding development strategies.

Through the implementation of this plan, NFU aims to evolve into a technological university that cultivates distinctive, innovative, internationally mobile, and passionate professionals. By emphasizing a balanced development in teaching and research, industry–academia collaboration, continuing education, and community service, the University aspires to become an exquisite and outstanding technological university with key strengths and academic excellence.

SWOT Analysis of NFU's Overall Institutional Development

S Strengths

1. Strong expertise in precision machinery, serving as a key institution for cultivating talent in Taiwan's smart machinery development.
2. The only national university of science and technology in Taiwan with a Department of Aeronautical Engineering, with graduates recognized by domestic aviation industries.
3. Emphasis on integrating practical teaching and research, with outstanding achievements in industry–academia collaboration.
4. Capstone projects combined with practical skill training consistently produce leading innovative technologies.
5. Excellent performance in industry-academia collaboration in mechanical, electrical, information, and biotechnology fields, with a high number of approved small-scale projects.
6. The High-Speed Rail Campus is adjacent to Yunlin HSR Station, with a complete site and convenient transportation.
7. New buildings and the Aviation Maintenance Training Center at the High-Speed Rail Campus provide significant advantages for internationalization.

W Weaknesses

1. Insufficient teaching space and internationalized environment, making it difficult to attract foreign students.
2. Located in a rural area with less convenient transportation, making it harder to recruit returning scholars to teach.
3. Students show limited motivation for academic pursuit, making it challenging to rapidly improve teaching quality.
4. Decline in academic research output and journal publications, hindering the improvement of international reputation.

O Opportunities

1. Taiwan's industrial restructuring and the rise of the knowledge economy position academic R&D capabilities as a key driver of economic growth.
2. Government actively encourages universities to engage in industrial R&D, with diverse and sufficient funding sources.
3. NFU's location in an agricultural county offers opportunities to assist allied nations in developing industries such as agricultural machinery and biotechnology.
4. High-tech industries urgently require higher education talent.
5. Engineering practical skills are highly valued by industry, benefiting student employment, internships, and career development, with graduates well recognized by employers.
6. Development of a UAV smart R&D cluster through the “Asia UAV AI Innovation Application Center,” strengthening links between academia and industry.

T Threats

1. Declining birthrate leading to rapid reductions in student enrollment, creating challenges for admissions.
2. Increasing competition as universities establish industry–academia collaboration centers to enhance both quality and quantity of partnerships.
3. Declining academic preparedness of students entering technical and vocational institutions, with undergraduates and graduate students showing limited research capacity.
4. Rapid environmental and contextual changes pose challenges to planning and execution of the High-Speed Rail Campus.
5. Growing competition for securing large-scale project funding.
6. Rigid regulations in public universities limit flexibility, making them less adaptable compared to private institutions.

Internal Control

NFU has established an Internal Control Task Force to build an effective internal control system, ensure lawful administration, promote efficiency, prevent malpractice, and enhance administrative performance while implementing supervisory mechanisms. In addition, an Internal Audit Team has been set up to examine the implementation of internal controls and to provide timely improvement recommendations, ensuring the continued and effective operation of the system.

The University has issued an Internal Control System Manual (Version 12.0, revised on October 29, 2024). Based on this manual, each unit identifies, analyzes, and evaluates risks according to its objectives, determines key operational risks, and designs control points to establish an appropriate and effective internal control system. In 2024, a total of 46 control activities (including 11 common and cross-functional items) were incorporated into the system design.

All first-level administrative units completed self-assessments in 2024. The results were consolidated by the responsible offices, reviewed and approved by the Internal Control Task Force, and subsequently followed up by the Internal Audit Team to ensure corrective measures or improvements were implemented. The Internal Audit Team is responsible for carrying out internal audits with an objective and impartial perspective, reviewing the effectiveness of internal control implementation, identifying deficiencies, and providing relevant recommendations. The progress of corrective actions is tracked, and at least one internal audit is conducted annually.

2-3 Financial Performance

NFU has established an effective financial management model that includes budget preparation, budget allocation, management of the university fund, and financial operation mechanisms. This system ensures that the fundamental needs and quality of teaching are safeguarded, while funds are effectively utilized and the financial resources of the university fund are expanded. These measures support campus development, enhance teaching quality, and ultimately achieve the goal of sustainable development.

University Fund Performance

In November 2023, during the first meeting of the University Fund Management Committee for Academic Year 2023 (AY112), the Committee approved the 2024 revenue enhancement and cost-saving measures. On the revenue side, the University will expand income from continuing education, seek opportunities to secure research projects or commissioned cases from external institutions, facilitate the licensing and transfer of research and development results, continue fundraising to increase self-generated income, and revitalize assets to broaden revenue sources. On the cost-saving side, the University will strengthen performance control of various institutional projects, actively implement energy-saving measures, and enhance budget control to improve financial efficiency.

NFU Financial Statements
http://account.nfu.edu.tw/files/11-1009-7162.php

2024 Revenue, Expenditures, and Funding Sources

Item		Amount (NTD)	Funding Source	
			Government Subsidy	Self-financing
Revenue	Non-operating Revenue	2,042,554,882	1,163,862,663	878,692,219
	Expenditures	157,626,915	-	157,626,915
Operating Revenue	Operating Costs and Expenses	2,317,227,344	1,374,017,623	943,209,721
	Non-operating Expenses	62,492,174	4,291,862	58,200,312

Unit: New Taiwan Dollars (NTD)

Notes:
Other Operating Income: Subsidies for teaching and research, other subsidies, miscellaneous operating income
Other Non-Operating Income: Asset usage and royalty income, penalty income, donation income, miscellaneous income
Other Operating Costs: Student stipends and scholarships
Other Operating Expenses: Miscellaneous operating expenses
Other Non-Operating Expenses: Property transaction losses, miscellaneous expenses

2022–2024 Operating Revenue and Expenditure

Item			2024 年	2023 年	2022 年
Revenue	Non-operating Revenue	Tuition Income	858,577,221	837,150,220	799,656,096
		Rental and Royalty Income	13,748,684	7,474,859	12,735,681
		Other Operating Income	1,170,228,977	1,089,936,496	1,110,993,892
	Expenditures	Financial Income	38,512,592	33,742,539	23,703,751
		Other Non-Operating Income	119,114,323	99,373,389	74,699,264
Operating Revenue	Operating Costs and Expenses	Instructional Costs	2,047,206,117	1,925,572,163	1,843,534,952
		Other Operating Costs	62,060,028	61,313,176	67,906,863
		Administrative and General Expenses	202,328,108	191,397,123	189,576,486
		Other Operating Expenses	5,633,091	6,073,117	5,329,606
	Non-operating Expenses	Financial Expenses	1,708,862	1,648,848	1,242,056
		Other Non-Operating Expenses	60,783,312	53,543,334	37,598,478

Unit: New Taiwan Dollars (NTD)

Sustainability Project Funding

In 2024, NFU executed a total of 557 projects, with combined funding reaching NT$697 million. Each project was mapped to the United Nations Sustainable Development Goals (SDGs) by faculty and staff. The number of projects and total funding allocated to each SDG are shown in the table below:

SDG Item		Number of Projects	Total Funding (NT$10,000)
1 消除貧窮	No Poverty	2	89
2 消除飢餓	Zero Hunger	58	3,557
3 良好健康與福祉	Good Health and Well-Being	128	11,346
4 優質教育	Quality Education	191	38,097
5 性別平等	Gender Equality	3	105
6 潔淨水與衛生	Clean Water and Sanitation	1	95
7 可負擔的潔淨能源	Affordable and Clean Energy	17	692
8 尊嚴就業與經濟發展	Decent Work and Economic Growth	96	25,022
9 產業創新與基礎設施	ndustry, Innovation, and Infrastructure	293	29,041
10 減少不平等	Reduced Inequalities	26	3,460
11 永續城市與社區	Sustainable Cities and Communities	32	1,810
12 負責任的消費與生產	Responsible Consumption and Production	47	3,227
13 氣候行動	Climate Action	46	3,450
14 水下生命	Life Below Water	1	100
15 陸域生命	Life on Land	4	242
16 和平正義與有力的制度	Peace, Justice, and Strong Institutions	3	202
17 夥伴關係	Partnerships for the Goals	20	3,639

Note: A single project may correspond to 1–4 SDGs.

2-4 Academic and Integrity Ethics

SDGs 16
SDG Target(s) 16.5

To actively safeguard the university's reputation, NFU promotes academic ethics education and outreach measures, enhancing faculty and staff literacy in academic integrity and establishing relevant mechanisms. In accordance with the “Guidelines for the Ministry of Science and Technology Subsidized Research Projects” and the “Ministry of Education Guidelines for Handling and Reviewing Academic Ethics Cases,” NFU formulated the “Regulations for the Establishment and Management of the Academic Ethics Committee of National Formosa University.” These efforts aim to strengthen researchers' awareness of academic ethics and research integrity, deepen academic ethics education, and ensure objective and fair handling of violations. This also fulfills the requirements of the United Nations Sustainable Development Goal SDG 16: Peace, Justice, and Strong Institutions.

1	1.Commit to research work to improve academic standards.
2	2.Uphold honesty and conscience in conducting research; research processes and conclusions must not be influenced by political pressure or vested interests.
3	3.Do not falsify, tamper with, or improperly cite others' data.
4	4.Do not plagiarize or misappropriate others' works (including computer programs, artistic works, or student assignments, reports, or other creations).
5	5.When citing others' works or data, sources must be clearly acknowledged.
6	6.Faculty and researchers must take responsibility for their published works or academic results, keeping accurate records and preserving relevant data for review.
7	7.For multi-author works (research outputs or papers), the order of authorship should reflect actual contributions.
8	8.When serving as a reviewer, maintain independence, fairness, and objectivity, avoiding bias due to academic factions or personal relationships.
9	9.Adhere to the Ministry of Education's regulations on academic ethics for teacher qualification reviews.
10	10.All faculty and researchers receiving Ministry of Science and Technology funding must comply with its academic ethics regulations.

To ensure effective implementation of academic and integrity ethics, NFU has established an Academic Ethics Committee as the highest supervisory body. In 2024, the committee convened once to review the university's academic ethics education mechanisms, promotional measures, and monitoring of faculty and student compliance. The committee also supervised administrative units in carrying out related tasks. The Office of Academic Affairs handles reports of student violations, while the Faculty Evaluation Committee is responsible for reviewing cases of faculty violations.

The implementation of academic ethics is jointly promoted by various units across the university. Results for the 2023 academic year were as follows:

Ten off-campus academic ethics seminars were announced and promoted. **10** sessions

One orientation session for new faculty was conducted. **1** sessions

Three course activities were held to introduce key issues related to intellectual property. **3** sessions

2-5 Information Security and Smart Campus

SDGs 3、4、9、16

SDG Target(s) 9.1、16.10

Information Security

NFU places great importance on information security as a critical aspect of campus governance. To strengthen information security protection and build a safe digital environment, the University obtained ISO 27001:2022 certification in 2024. The scope of certification includes the computer center server room, network operations, and security management for the following systems and services: Faculty Academic Portfolio System, Student Records and Grade Management System, Counseling Case Management System, E-Learning Platform, Student Counseling Appointment System, University Administrative e-Platform, Active Directory (AD) Services, Virtual Host Operations and Maintenance, as well as administrative and academic units including the Office of the Secretariat, Office of Accounting, Office of Academic Affairs, Office of Student Affairs, Office of General Affairs, Office of Research and Development, Office of International Affairs, Office of Sustainability & Social Responsibility, Library, Computer Center, Center for Teaching and Learning Development, General Education Center, Center for Institutional Research and Development, Intelligent Machinery and Smart Manufacturing Research Center, Language Teaching Center, and Physical Education Office.

The University has implemented the Information Security Management System (ISMS) in phases across all units. In 2024, 17 first-level administrative units (comprising 25 second-level units) were subject to both internal and external ISMS audits. All units complied with the university's information security policies and successfully passed certification. Additionally, on-site audits were conducted for five external vendors providing outsourced information system services, with no major deficiencies reported.

NFU has established a cross-unit Information Security and Personal Data Protection Promotion Committee, with the Vice President serving as the Chief Information Security Officer. This committee discusses and refines information security policies and strategies. In 2024, the University convened three information security meetings. Furthermore, annual inventories of information systems and digital assets were carried out across all first- and second-level administrative and academic units. NFU also provides regular training programs on information security and personal data protection, ensuring that all faculty, staff, and administrative leaders complete a minimum of three hours of training per year to enhance awareness and compliance.

NFU Information Security Actions and Achievements in 2024

	Information Security Action	Actual Outcome
1	The Computer Center continuously monitors server room operations and backbone network performance to ensure system stability.	Implemented FortiWeb WAF (Web Application Firewall) to safeguard NFU information systems against denial-of-service attacks, SQL injection, and cross-site scripting (XSS).
2	Established the Information Security and Personal Data Protection Promotion Committee across multiple units, with the Vice President appointed by the President as Chief Information Security Officer (convener). Meetings are held annually.	A total of 3 information security meetings were convened in 2024.
3	Conduct annual inventories of information systems and digital assets.	In 2024, inventories were conducted for all first- and second-level administrative and academic units.
4	Conduct annual training sessions on information security and personal data protection to strengthen awareness among faculty and staff.	Held 8 training sessions totaling 24 hours.
5	Provide ISO 27001:2022 Lead Auditor training to enhance professional expertise. Guidance and audits (internal and external) are carried out for units progressively adopting ISMS.	Conducted 1 Lead Auditor training program, with 12 participants, all 12 certified.
6	Commission professional consulting firms to audit outsourced service providers annually to ensure outsourcing security.	In 2024, 5 vendors underwent audits, with no major deficiencies found.
7	Conduct penetration testing of core information systems every two years.	In 2024, 2 core systems were tested and patched.
8	Perform annual vulnerability scanning of information systems.	At least 1 vulnerability scan was performed, with medium- and high-risk issues identified, notified, patched, and retested.
9	Conduct social engineering drills in cooperation with higher authorities at least twice a year.	At least 2 drills conducted in 2024.
10	Enforce restrictions on the use of ICT products from mainland Chinese manufacturers.	Adjusted procurement processes and strictly prohibited the use of such products on campus and in leased facilities.

Building a Smart Campus

Enhancing Services

1.Integrated Google Maps, hazardous road sections, and rental housing information into the nation's first Cloud-Based Rental Housing Platform, providing students with safe rental resources.
2.The Journal of National Formosa University partnered with Airiti iPress Online Submission System to digitize manuscript submission, review, and publication processes. This improved efficiency, reduced paper usage, and increased visibility and international recognition of the journal.
3.Implemented a Smart Network Management System integrated with LINE Notify, enabling administrators to receive instant alerts on system failures and issues.
4.Upgraded campus network infrastructure in 2024, improving wired networks in the College of Electrical Engineering, Interdisciplinary Practice Building, and Technology Research Center.
5.Updated the mobile app, adding the “Zebra Action” feature in 2024 for advisor visits, student surveys, and campus safety management.
6.Enhanced the Online Student Certification Document System by introducing multiple payment options for students and alumni.
7.Added credit card payment to the Admissions Information System, improving convenience for applicants.

Smart Management

1.Replaced old air conditioners with cabinet-type precision cooling systems featuring variable-frequency compressors, intelligent temperature control, and hot/cold aisle management to improve efficiency and reduce energy consumption.
2.Replaced physical servers with virtual machines, optimizing data center space, reducing energy use and cooling demands, lowering electricity costs, and in creasing operational efficiency.
3.Installed smart meters and power management systems in teaching buildings, enabling real-time monitoring, scheduled on/off functions, and electricity savings.

Streamlined Administration

1.Promoted paperless e-forms through an online approval system. By 2024, 41 types of forms had been digitized, reducing paper usage by approximately 96, 730 A4 sheets.
2.Enhanced the Student Records and Grade Management System with verification rosters (degree verification, ID card issuance, etc.), simplifying administrative tasks.
3.Improved the Labor Pension Settlement System, integrating purchasing and payroll system data archiving, with batch settlement functions to ease workload.
4.Enhanced supplementary insurance bonus calculation, integrating purchasing and payroll data to reduce complexity and staff workload.
5.Digitized the Faculty Teaching Hour Confirmation System; by 2024, about 77% of confirmations were completed online, enabling earlier payments.
6.Developed a Graduate Thesis/Dissertation Examination Application System, allowing students to apply through the eCare platform. Applications were processed via e-forms with email and LINE notifications, improving approval efficiency. In AY112, 67 applications were submitted.
7.Implemented an Indigenous Student Data Maintenance System to ensure compliance with regulations and improve administrative data management.

Optimizing Teaching

1.Updated the Digital Learning Platform in 2024 with a new interface and modules, improving user experience and resolving cybersecurity issues.
2.To enhance programming skills, NFU co-hosted the 9th National Collegiate Programming Contest on July 10, 2024. NFU students achieved outstanding results, winning 1 gold (first place), 2 silver, and 2 bronze medals, with five teams advancing to the ICPC Taiwan Regional Contest.

3 Creating a Happy Campus

Material Topic Management

Facing	Social Dimension, Environmental Dimension
Significant	1.Talent Attraction and Retention 2.Campus Safety Management 3.Environmental Health and Sanitation Management
Corresponding To Gri Criteria	401、403、405
Corresponding Sdgs	
Policy And Commitment	1.To attract and retain outstanding talent, in addition to following relevant civil service regulations for faculty and staff salaries and benefits, the University also implements a flexible salary scheme under the Ministry of Education’s Higher Education Sprout Project. This scheme covers teaching, research, and service dimensions, encouraging faculty members to excel across different fields. 2.To protect the rights and interests of faculty and staff and to foster a friendly campus environment, the University has established an equal employment complaint mechanism. Faculty and staff may file complaints through this channel when their rights and interests are infringed. 3.To ensure the safety and health of all faculty, staff, and students across campus facilities, the University has established the “Occupational Safety and Health Policy of National Formosa University.” Upholding the principle of safeguarding the well-being of all members, the University is committed to providing a safe, healthy, and high-quality campus environment.
Target	1.All new students shall complete occupational safety and health (OSH) training within one month of enrollment. 2.At least two general occupational safety and health (OSH) training sessions shall be conducted each year. 3.The number of associate professors and below receiving flexible salary payments shall not be less than one-third of the total recipients of such payments.
Complaint Mechanism	・Student Grievance Channe https://nfuosa.nfu.edu.tw/studaff/law.html ・Faculty and Staff Grievance Channelhttp://personnel.nfu.edu.tw/files/11-1008-6092.php ・Labor-Management Meeting
Actions And Results	1.In 2024, a total of 233 faculty and staff members received flexible salary subsidies. 2.In 2024, six distinguished professors received awards. 3.In 2024, the Gender Equality Education Committee convened two meetings and organized a total of 49 related gender equality courses, lectures, and activities, with participation exceeding 10,000 person-times. 4.In 2024, two faculty grievance cases were filed, and both cases were resolved. 5.In 2024, a total of 3,471 person-times of faculty and students participated in special education counseling services. 6.In 2024, approximately NT$1.18 million was allocated for Indigenous students, supporting 62 recipients. In addition, 22 after-school tutoring and remedial teaching sessions were provided for Indigenous students. 7.In 2024, scholarships totaling NT$37,094,210 were disbursed. 8.In 2024, 12 occupational safety and health training sessions were held for faculty, staff, and students, with a total of 1,614 participants. 9.In 2024, 172 health promotion activities were organized, with 4,895 participants. 10.In 2024, 164 student health maintenance activities were organized, with 13,861 participants. 11.In 2024, sports activities were organized with 896 participants.

3-1 Talent Attraction and Retention

SDGs 5、8

SDG Sub-Targets 5.1、8.8

In response to institutional development and the pursuit of teaching excellence, the University has established a comprehensive personnel system. Faculty members with strong academic backgrounds are recruited, while administrative staff are selected based on their passion for service. The recruitment process is grounded in gender equality and merit-based principles, ensuring that no individual is treated differently on the basis of gender, age, religion, ethnicity, family status, or political affiliation.

As of 2024, the University employed a total of 773 full-time faculty and staff members, including 35 employees with officially recognized disabilities. This demonstrates the University's commitment to providing equal opportunities, promoting independence and development for persons with disabilities, and embodying the values of SDG 10 (Reduced Inequalities). In anticipation of institutional growth and potential changes in workforce structure, the University has established detailed plans to rationalize manpower allocation and enhance staff quality, with flexibility to make adjustments as needed. The following sections present statistical distributions of full-time faculty, part-time faculty, and administrative staff.

Distribution of Staff in 2024

Military Instructor	2
Regular Staff	88
Rare/Highly Specialized Technical Personnel	3
Contracted Staff	147
Program Staff	9
Contracted Administrative Officer	1
Project Staff	141
Campus Security Guard	4
Technicians and General Workers	16
Total	411

Distribution of Full-Time Faculty in 2024

Category	Gender		Age			Total
	Male	Female	Under 30	31-50	51 and above	
Professor	126	18	2	117	243	362
Associate Professor	85	21				
Assistant Professor	65	16				
Lecturer	3	2				
Contract Teaching Staff	18	8				

Distribution of Part-Time Faculty in 2024

Category	Gender		Age			Total
	Male	Female	Under 30	31-50	51 and above	
Professor	10	0	3	79	175	257
Associate Professor	15	4				
Assistant Professor	66	21				
Lecturer	91	50				

Faculty Recruitment and Attrition

To ensure the effective operation of the University's education, the recruitment and appointment of new faculty members is carried out on an ongoing basis. The following presents the statistical data on full-time faculty recruitment and attrition from 2022 to 2024.

New Full-Time Faculty Hires and Proportion

Category	Gender, Age		2022	2023	2024
Full-Time Faculty	Gender	Male	10	20	4
		Female	2	1	1
	Age	Under 30	1	0	0
		31-50	11	14	4
		51 and above	0	7	1
	Number of New Hires		12	21	5
	Proportion of New Hires		3.4%	6.2%	1.5%

Number and Proportion of Resigned Full-Time Faculty

Category	Gender, Age		2022	2023	2024
Full-Time Faculty	Gender	Male	7	16	5
		Female	1	0	1
	Age	Under 30	0	0	0
		31-50	1	4	1
		51 and above	7	12	5
	Number of Resignations		8	16	6
	Attrition Rate		2.3%	4.7%	1.8%

Family-Friendly (Childcare Support)

The University emphasizes gender equality and strictly adheres to relevant regulations regarding parental leave, including the Act of Gender Equality in Employment, the Regulations on Unpaid Parental Leave for Civil Servants, the Regulations on Unpaid Parental Leave for Educational Personnel, and the Implementation Measures for Unpaid Parental Leave for Childcare. Faculty and staff members are entitled to apply for parental leave until their children reach the age of three. Upon the expiration of the parental leave period, the University ensures that returning employees are reinstated to their original positions.

Family-Friendly (Childcare Support) Statistics

Academic Year	Prenatal Checkup Accompaniment and Paternity Leave (Male)	Prenatal Checkup Leave and Prenatal Maternity Leave (Female)	Maternity Leave	Unpaid Parental Leave for Childcare	
				Male	Female
110	1	11	12	2	9
111	2	8	7	1	12
112	3	7	9	3	9

3-2 Compensation Policies and Benefits

SDGs 5、10、16

SDG Sub-Targets 5.1、5.c、10.2、10.3、16.6

Compensation Policy

The compensation structure for faculty members at the University consists mainly of base salary and academic research allowances. The base salary is determined in accordance with the pay scale for educational personnel under the civil service salary system, while the academic research allowance follows the regulations set forth in the “Supplementary Pay Scale for Academic Research at Public Universities and Colleges.”
Upon appointment, new faculty members start at the minimum salary grade of their designated rank. Faculty members with prior relevant experience may apply for seniority recognition by submitting supporting documentation. Such applications are reviewed and processed in accordance with the Teacher Remuneration Act and the Regulations on the Recognition of Prior Seniority for Faculty Compensation.

Title	Average Monthly Compensation (NTD)
Professor	124,290
Associate Professor	102,825
Assistant Professor	91,835
Lecturer	75,005

◉ Average Weekly Teaching Hours of Full-Time Faculty

Title / Academic Year	111	112	113
Professor	10.63	10.18	10.58
Associate Professor	11.42	11.4	11.3
Assistant Professor	12.26	12.05	12.4
Lecturer	15.36	15.09	14.78
Other Faculty	8	10.67	9.5

Seniority Recognition Process

◉ Seniority Recognition Process by the Personnel Office

Eligibility for Seniority Recognition: Faculty members who have previously served in the following positions may apply for recognition of prior service:

(1) Full-time faculty at domestic public universities.
(2) Full-time faculty at domestic private universities (supporting documents must include statements such as “with satisfactory performance” or equivalent remarks).
(3) Full-time positions or contract-based personnel within domestic government agencies (e.g., postdoctoral researchers employed under relevant Academia Sinica regulations).

Procedure

The Personnel Office processes the application and submits it for the President's approval.

◉ Seniority Recognition Requiring Review by the Department/Institute/ Center and College Faculty Evaluation Committee

Eligibility for Seniority Recognition: Prior service from “private institutions,” “project-based research staff,” or “faculty and researchers at overseas universities” may be recognized if the following criteria are met:
(1) The service was in a full-time position.
(2) The previous position was closely related to the subject area of the faculty member's current teaching appointment.
(3) The work experience was relevant to teaching requirements.
(4) The position was of a comparable rank to the current faculty position.
(5) The service was at a sizable and internationally renowned research institution or private organization.
(6) The service performance was deemed satisfactory, based on the following:
- An official certificate of satisfactory service issued by the previous institution.
- Annual performance evaluations graded “B” or above, or a score of 80 or above.
- In the absence of evaluations, evidence of annual promotions shall be deemed satisfactory.
- If no such documentation is available, the three-level Faculty Evaluation Committees may assess prior service based on research capacity and academic achievements and deem the performance satisfactory.
- Other supporting documents, such as relevant service records or award certificates, may be considered; if described in the application form and approved by the three-level Faculty Evaluation Committees, the service performance may also be recognized as satisfactory.

Procedure:

(1) If reviewed together with the appointment case: The application shall be submitted to the Department/Institute/Center and College Faculty Evaluation Committees, which will deliberate and determine the years of service to be recognized and the corresponding salary grade.
(2) If reviewed separately from the appointment case: Within one month after the initial salary grade determination, the faculty member must submit all supporting documents for review by the Department/Institute/Center and College Faculty Evaluation Committees. The application shall then be endorsed by the Committee Chair and the Personnel Office, and submitted to the President for final approval. Once approved, the seniority recognition will be retroactively applied from the faculty member's actual date of employment.

Compensation and Benefits

To attract and retain outstanding talent, the compensation and benefits of faculty and staff members at the University are administered in accordance with relevant regulations. In line with the Ministry of Education's Flexible Salary Scheme for Recruiting and Retaining Exceptional Faculty at Universities and Colleges and the Higher Education Sprout Project, the University continues to implement a flexible salary system. Evaluation criteria cover teaching, research, and service, while also incorporating innovative teaching (e.g., participation in Ministry of Education teaching projects and teaching practice research programs), innovation and entrepreneurship initiatives, and the implementation of University Social Responsibility (USR).

Through this mechanism, the University seeks to broaden incentives across different fields and to attract and retain distinguished talent from Taiwan and abroad with exceptional contributions in teaching, research, service, and industry practice.

◉ Five-Year Outcomes of Flexible Salary Implementation

Year	2020	2021	2022	2023	2024
Number of Outstanding Faculty in Teaching, Research, and Service	183	182	179	200	200
Number of Newly Recruited Distinguished Talent	22	28	22	34	33
Subsidy Ratio for Associate Professors and Below (%)	55.1%	59.5%	53.7%	55.6%	54.1%

◉ 2024 Statistics of Flexible Salary Faculty and Full-Time Faculty

Gender / project	Male	Female	Total
	Number of people		
Faculty Receiving Flexible Salary	192	41	233

Incentive System

The University continues to promote a research performance evaluation and incentive system to recruit outstanding talent and encourage faculty members to actively engage in innovation and research and development. To this end, the University has established various regulations and guidelines, including the Incentive Regulations for Encouraging Research Projects, the Implementation Measures for Matching Funds of Sponsored Project Incentives, the Outstanding Research Performance Award Regulations, the Distinguished Chair Professor Regulations, the Distinguished Faculty Regulations, the Guidelines for Faculty Research Grants, and the Guidelines for Research Equipment Subsidies for Newly Recruited Faculty.

Through these mechanisms, the University provides continuous guidance and incentive measures at different stages of research development, thereby stimulating faculty members' motivation to pursue academic research. A summary of incentive items is listed below:

Summary of Incentive Items

Incentive Item	Outcome
Subsidy for Research Equipment for Newly Recruited Faculty	From 2020 to 2024, subsidies were granted to 56 newly recruited faculty members, totaling approximately NT$8.9 million. In the second half of 2024, no subsidies were issued due to regulatory revisions.
Incentive Subsidies for Faculty Whose MOST Research Proposals Were Not Approved	From 2021 to 2024, a total of 76 cases were subsidized, amounting to NT$4.71 million.
University Matching Funds for Sponsored Research Projects	From 2021 to 2024, equipment subsidies amounted to approximately NT$37.25 million, and operating expenses amounted to approximately NT$31.48 million.
Faculty Research Grants	From 2021 to 2024, a total of 254 faculty members received grants, with a total funding amount of approximately NT$4.47 million.
Awards for Outstanding Academic Research and Industry–Academia Collaboration	From 2021 to 2024, a total of 18 faculty members were awarded, with total funding of NT$1.8 million.
Distinguished Professors	6 awardees in 2020; 6 awardees in 2021; none in 2022; 5 awardees in 2023; 6 awardees in 2024.
Chair Professors	1 awardee in 2021; 1 awardee in 2022; none in 2023 and 2024.

3-3 Gender Equality and Human Rights

SDGs 5、10、16

SDG Sub-Targets 5.1、5.c、10.2、10.3、16.6

Gender Equality

To establish an education environment free from gender discrimination, to enhance campus safety and harmony, to safeguard the fundamental human rights guaranteed by the Constitution, and to uphold gender equality, the University has established the Gender Equality Education Committee of National Formosa University in accordance with the provisions of the Gender Equity Education Act.

In 2024, the University implemented multiple gender equality programs and initiatives, achieving positive outcomes. The following section presents a list of the programs carried out and their corresponding results.

◉ 2024 Gender Equality Education Program Outcomes

Program/Activity	Outcome
Gender Equality Education Program	Operation of the Gender Equality Education Committee: 2 meetings convened.
Gender Equality Courses	A total of 16 hours of gender equality courses were offered.
General Education Lectures on Gender Equality	5 lectures organized, with 2,500 participants.
Art Exhibitions and Performances on Gender Equality	Joint exhibition “I, We – Works by Huang Chi-Hsuan & Tsai Chia-Yin”, with 210 participants.
Qing Sheng Xi Yu Singing Contest	Duo teams could consist of male–female, male–male, or female–female groups, providing a stage for self-expression across all genders; 3,000 participants.
Acquisition of Gender Equality Books and Audiovisual Materials	1.Purchased 20 recommended gender equality books, including “What Kind of Life Do You Want to Live?” – An Introduction to Gender for Girls and Women by a University of Tokyo Professor. 2.Purchased 6 online audiovisual resources, including “I Might Never Be Thin” and “Surprise Proposal.”
Gender Equality Workshops in Student Dormitories	5 thematic workshops held, with 277 participants.
Friendly Campus Week Activities	1 freshman orientation, 1 special lecture, 4 anti-bullying meetings, and 1 anti-drug campaign at the campus fair, with a total of 3,126 participants.
Community Gender Education Outreach by Student Clubs	9 outreach sessions conducted, reaching 373 elementary school students.
Human Rights and Legal Education Lectures	1 special lecture on a friendly campus and 5 lectures on traffic safety education, with about 450 male and 360 female participants.
Gender Equality Education Series	17 events covering gender awareness, emotional education, prevention of gender-based incidents, and diverse gender issues, with a total of over 309 participants.

Investigation of Gender-Related Incidents

In accordance with the Gender Equity Education Act and related regulations, the University has established the Procedure for Application, Investigation, and Handling of Campus Gender-Related Incidents. This procedure clearly stipulates the mechanisms for handling cases of sexual harassment involving students, faculty, and staff. The process covers application, preliminary review, establishment of an investigation committee and reporting, appeal, reconsideration, and recommendations for disciplinary actions. Throughout the procedure, the University ensures the protection of privacy, physical and mental well-being, and the right to appeal for all parties involved.
According to statistics for the full year of 2024, the number of sexual harassment cases filed by faculty, staff, or students at the University was zero. This outcome demonstrates the effectiveness of the University's efforts in promoting gender equality awareness, fostering a friendly campus culture, and maintaining a well-established grievance mechanism, thereby continuing to build a campus environment characterized by diversity, respect, and zero tolerance for discrimination.

Faculty, Staff, and Student Grievance Mechanism

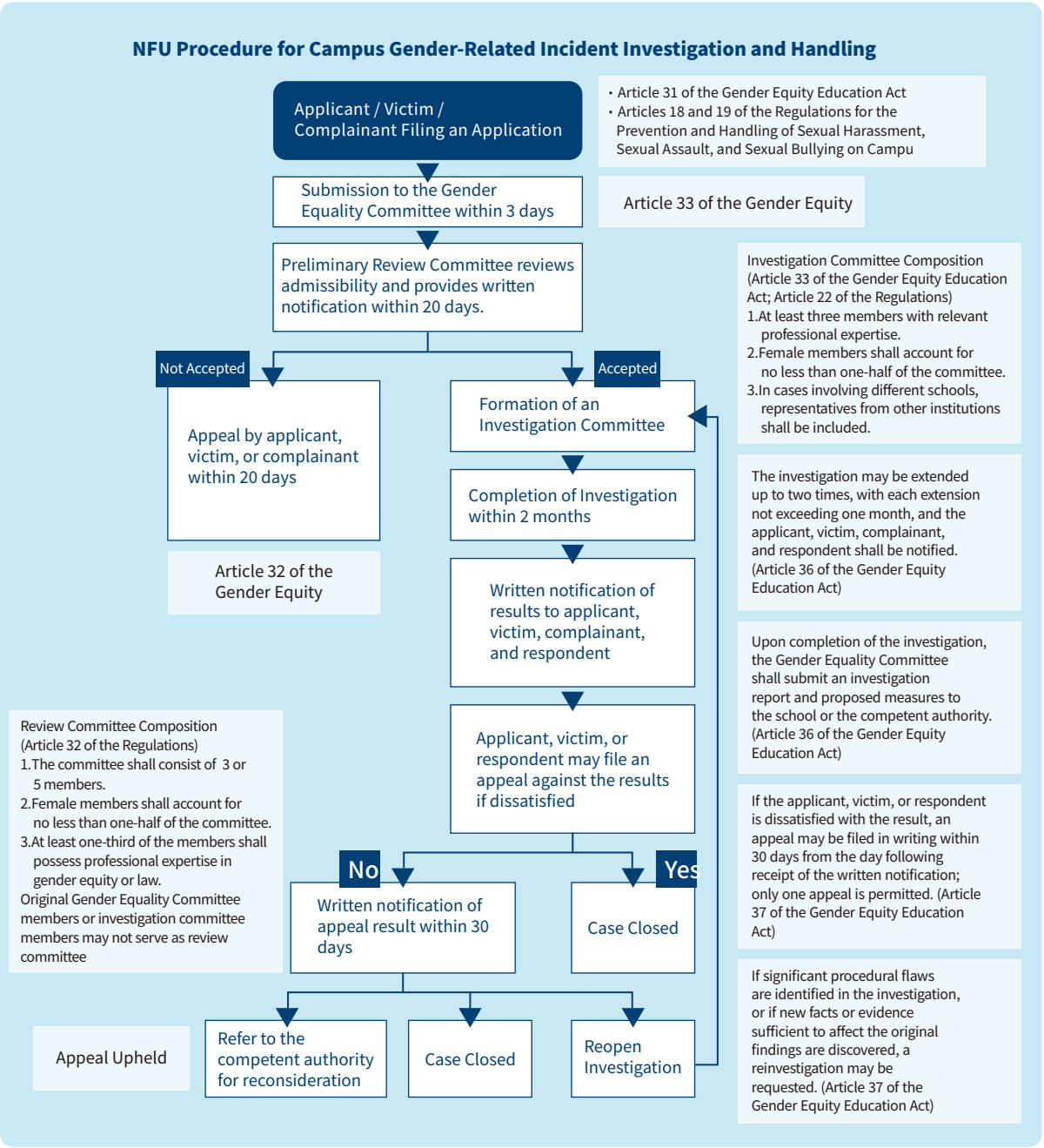
To safeguard the rights and interests of faculty, staff, and students, the University has established the Faculty Grievance Review Committee, the Staff Grievance Review Committee, and the Student Grievance Review Committee in accordance with relevant regulations. These committees provide lawful, impartial, and confidential channels for grievances.Faculty and staff who believe they have been subjected to improper treatment or infringement of rights on campus may file a written grievance, which will be investigated and reviewed by the respective committee. Throughout the process, strict measures are taken to protect personal data and to ensure that the grievance does not affect promotions or personnel transfers.Students may raise concerns through the Student Grievance Review Committee, which promotes communication between faculty and students and strengthens campus ethics.In 2024, a total of five grievance cases were received (two from faculty, three from students, and none from staff). All cases were properly addressed and closed, demonstrating the fairness and effectiveness of the University's grievance mechanism.

◉ University Grievance Channels and Number of Cases Received

Grievance Channel	Cases Received in 2024	Cases Resolved
Faculty Grievance Review Committee	2	2
Staff Grievance Review Committee	0	0
Student Grievance Review Committee	3	3

◉ http://personnel.nfu.edu.tw/files/11-1008-6092.php
◉ https://nfuosa.nfu.edu.tw/studaff/law.html

NFU Procedure for Campus Gender-Related Incident Investigation and Handling



3-4 Safe and Secure Learning

SDGs 1、2、4、8、10

SDG Sub-Targets 1.3、2.1、4.5、4.a、8.5、10.2、10.3

Special Education

In 2000 (Academic Year 89 of the ROC calendar), the University established a Resource Classroom in accordance with the Ministry of Education's Guidelines for Implementing Programs to Support Students with Disabilities in Universities and Colleges. The purpose is to provide tailored counseling and assistance to students with disabilities studying in mainstream education systems, helping to offset learning disadvantages, enabling them to successfully complete higher education, and achieving the goal of inclusive education. The Resource Classroom also provides a space for students with disabilities on campus to interact, build supportive interpersonal networks, and share growth experiences.

In 2024, the University invested more than NT$7.35 million in the recruitment and support of students with disabilities. The outcomes are summarized as follows:

◉ Outcomes of Special Education Support Services in 2024

Activity		Outcome
Ndividualized Support Program For Students With Disabilities	Peer Academic Assistance	49 students participated, total 1,545 hours.
	Life Assistance	6 students participated, total 106 hours.
	Comprehensive Assistance	2 students participated, total 76.5 hours.
	Note-taking Support in Courses	4 students participated, total 133 hours.
Academic Tutoring	Basic Subject Tutoring9 teachers participated, total 276 hours.	9 teachers participated, total 276 hours.
	Specialized Subject Tutoring	26 teachers participated, total 351.1 hours.
Student Counseling Activities	Career Counseling Series	7 sessions, 143 participants.
	“Love Without Barriers” Disability Awareness Week & Special Education Promotion Activities	6 sessions, 1,287 participants.
	Special Education Knowledge Lectures	3 sessions, 89 participants.
	Interpersonal Growth Groups	10 sessions, 226 participants.
	Other Extracurricular Activities	13 sessions, 789 participants.
Meetings and Seminars		12 sessions, 937 participants.

Work Meetings and Parent-Teacher-Student Forums

Professional After-School Guidance by Faculty

Peer Tutoring

After-Class Tutoring for Fundamental Subjects

6th National University Resource Center Intercollegiate Exchange Program

Outdoor Educational Field Activity (Extracurricular)

Career Counseling Activities – Employment Resource Tours

Special Education Awareness Program: Blindness Experience

Indigenous Student Support and Friendly Campus Initiatives

To strengthen the sense of community among indigenous students and to enhance their cultural identity, the University has established an Indigenous Resource Center. The Center continuously promotes activities related to friendly campus initiatives, cultural issues, and ethnic awareness, providing faculty and students with more opportunities to engage with the Center and to learn about Taiwan's indigenous cultures.

The Center also serves as a hub to reinforce collaboration among different units, optimize the use of campus resources, and ensure indigenous students can more fully access academic and daily life support. In 2024, the University allocated approximately NT$1.18 million to support indigenous student programs.

Daily Life Support

To ensure that indigenous students can study with peace of mind, the University provides the following care measures:

1. Priority Dormitory Accommodation: A 100% provision rate of dormitory beds for indigenous students.
2. Scholarship Applications: Assistance in applying for various on-campus scholarships, with indigenous students listed as key beneficiaries under the University's Flying High Cultivation Program. In 2024, a total of 62 students received scholarships.
3. Life Counseling: Support for indigenous students in adapting to dormitory and campus life.

Learning Support

To facilitate effective learning for indigenous students, the University provides:

1. Academic Tutoring: Integrated with the Flying High Cultivation Program, offering after-school tutoring and remedial teaching resources, with 22 sessions held.
2. Counseling for Learning and Test Anxiety: Conducting surveys on learning difficulties, organizing focus groups to identify causes of learning challenges, and providing appropriate counseling through a consultation mechanism.
3. Consultation on Withdrawal or Transfer: Investigating the reasons for withdrawal or transfer, compiling data and analysis, and providing corresponding life counseling support.

Career and Employment Guidance

To assist indigenous students with career planning and certification preparation before graduation, the University offers:

1. Career Counseling: Career and employment guidance linked with the Career Development Center, providing job information and, if needed, one-on-one career exploration counseling by professional advisors.

2. Certification Guidance: Providing indigenous students with career workshops, professional training courses, and certification tutoring courses, assisting them in obtaining relevant professional licenses, and offering subsidies for examination fees.

Friendly Campus Initiatives

To ensure indigenous students' full participation and connection with their communities, the University organizes diverse activities to strengthen a culture of inclusion and care:

1. Enhancing Cultural Identity and Multicultural Competence: Establishing an indigenous student community and holding 24 activities with a total of 620 participants to encourage engagement.
2. Cross-Cultural Competence Development: Organizing visits to indigenous hometown communities to foster emotional bonds with their cultural roots.


Promotion of Indigenous Education for All – Indigenous Cultural Club Performance

Career and Employment Guidance – Company Visit


Promotion of Indigenous Education for All – Indigenous Culture Week


Promotion of Indigenous Education for All – Urban Indigenous Series


Promotion of Indigenous Education for All – Tribal Visits


Indigenous Employment and Welfare Orientation


Career and Employment Guidance – Career Exploration Lectures and Courses


Academic Tutoring – Peer Study Group


Promotion of Indigenous Education for All – Indigenous Arts and Music/Dance Courses

Comprehensive Student Support Mechanisms

The University integrates internal and external resources to build a comprehensive support system addressing students' challenges. This system provides individualized assistance in admission, financial and daily life support, professional counseling, competency training, and career guidance. These measures help offset learning disadvantages, enhance students' academic performance, and achieve educational equity.

The Flying High Cultivation Program encourages students to make use of their extracurricular time to participate in non-credit professional or vocational courses, establish study groups, and improve their learning outcomes. From 2018 to 2024, the number of beneficiaries increased from 359 to 447, while the student participation rate rose from 34% to 43%, representing a 9% increase. Both the number of students assisted and the participation rate have shown consistent growth, reflecting the program's effectiveness in reaching more students each year.

Furthermore, the University has established the Flying High Assistance and Incentive Guidelines, which strengthen support across four main areas: academic tutoring, competency training, career guidance, and financial/life support. Measures include diverse learning and living grants, subsidies and awards for professional certification examinations, subsidies for vocational and professional training registration, special assistance programs, incentives for peer study groups, and the Dream Fulfillment Project.

◉ Results of Safe and Secure Learning Programs

Assistance Program	Mechanism	2024 Results
Diverse Learning and Living Grants	Participation in non-credit courses or activities; NT$300 per hour; maximum NT$10,000 per month	23,202 hours (1,625 participants)
Certification Exam Subsidies and Incentives	Subsidy: Application with proof of payment and transcript	338 certifications subsidized
	Incentive: NT$1,000 per Class C license; NT$2,000 per Class B license	250 certifications rewarded
Subsidies for Vocational and Professional Training	Subsidies for registration fees of professional training or career-related courses (on/off-campus)	565 courses (425 participants)
Special Assistance Program	Department-recommended students in urgent need of financial support; minimum 10 hours of diverse learning per month and at least 2 learning items; NT$10,000 granted monthly	3,670 hours (367 participants)
Peer Study Group Incentives	Minimum of 16 hours per month; NT$2,000 reward per student	16,258 hours (128 groups)
Dream Fulfillment Project	Students propose learning or career plans; upon committee approval, subsidies of NT$10,000–15,000 per month for 12 months	86 participants

Scholarships and Financial Aid

To provide students with a secure learning environment and safeguard the rights of disadvantaged students, National Formosa University offers a variety of scholarships, tuition and fee waivers, and other financial assistance measures. Through these initiatives, the University strives to achieve educational equity. In addition, the University has established a comprehensive career planning mechanism and provides counseling for disadvantaged students, thereby fostering a friendly campus environment that allows all students to learn with peace of mind.

In Academic Year 2022 (ROC Year 111), Feng Tay Enterprises established the Feng Tay Ms. Wang Liu Mei-Hui Outstanding New Student Scholarship at the University. From Academic Year 2022 to 2026 (ROC 111–115), Feng Tay has committed to providing NT$5 million annually in scholarships to reward outstanding new students admitted to the University.

◉ 2024 Scholarship Applications and Disbursement Statistics

Tuition and Fee Revenue (NT$)
496,391,868

Budgeted Amount (NT$) 40,167,246

Budgeted Amount as % of Tuition and Fee Revenue 8.09 %

Actual Disbursement (NT$) 37,094,210

Actual Disbursement as % of Tuition and Fee Revenue 7.47 %

Public Scholarships Disbursed to NFU Students (NT$) 37,094,210

Special Work-Study Subsidy Amount (NT$)	General Work-Study / Learning Grant Amount (NT$)	Living Assistance Grant Amount (NT$)
16,959,002	7,304,075	672,000
Special Work-Study Recipients	General Work-Study / Learning Grant Recipients	Living Assistance Grant Recipients
869 people	1,473 people	111 people

Note: The data includes only student public funding and excludes other programs.

3-5 Campus Safety and Health Activities

SDGs	3、4、5、8
SDG Sub-Targets	3.3、3.4、3.9、3.d、5.2、5.6、8.8

To ensure the safety and health of all faculty, staff, and students in every area of the University, National Formosa University has established the Occupational Safety and Health Policy. The University is committed to eliminating risk factors that may cause illness, injury, disability, or death on campus. Guided by the principle of safeguarding the well-being of the entire university community, the University strives to provide a safe, healthy, and high-quality campus environment.

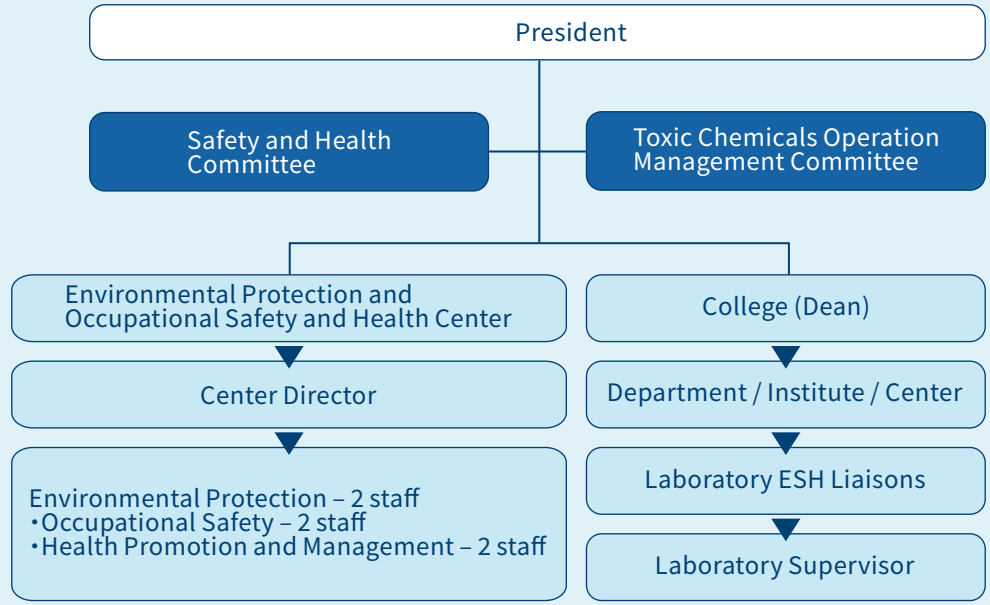
Occupational Safety and Health Management

To safeguard the safety and health of all applicable personnel, National Formosa University has established the Occupational Safety and Health Management Regulations in accordance with the Occupational Safety and Health Act and its subsidiary regulations. The University has also set up an Occupational Safety and Health Committee and an Environmental Protection and Safety and Health Center as key management bodies.

The Occupational Safety and Health Committee convenes once every three months, with participants including the President, Vice Presidents, Director of the Environmental Protection and Safety and Health Center, Center managers, heads of first-level units, section chiefs of the General Affairs Office (Affairs Section and Construction Section), labor representatives (including those from labor-management meetings), representatives for civil servant safety protection, and student representatives. The meetings cover the review of current occupational safety and health policies, and in the event of occupational accidents during the quarter, discussions and evaluations are conducted.

The University has established an Environmental and Safety and Health Organization, along with a dedicated contact email and a directory of responsible personnel by function. Faculty and staff may directly raise occupational safety and health concerns through these channels. Major issues can be submitted as proposals to the Occupational Safety and Health Committee for discussion.

NFU Environmental Protection and Occupational Safety and Health Organization Chart



Occupational Safety and Health Education and Training

In accordance with the Occupational Safety and Health Act and the Occupational Safety and Health Education and Training Regulations, National Formosa University has established the Guidelines for Occupational Safety and Health Education and Training. These guidelines aim to ensure that all faculty, staff, and students receiving wages from the University are able to avoid occupational injuries, safeguard their physical and mental well-being, and strengthen their awareness of workplace hazards and protective measures.

Particular emphasis is placed on training new faculty, staff, and students to recognize potential hazards and acquire essential safety and health knowledge for disaster prevention and workplace safety.

The University's occupational safety and health education and training plan is structured as follows:

◉ Occupational Safety and Health Education and Training Plan

Type	Timing	Participants	Training Hours
Occupational Safety and Health Training for New Employees	Upon reporting to duty for new employees or when current employees are reassigned	New employees or current employees with job changes	Minimum 3 hours per person
General Occupational Safety and Health Training	Twice annually	All faculty and staff	3 hours per person
Occupational Safety and Health Training for New Students (General)	Within one month after the start of the semester	All new students	3 hours per person (general departments)
Occupational Safety and Health Training for New Students (Machine Safeguarding and Hazard Awareness)	Within one month after the start of the semester	All new students required to enter laboratories or practice sites	3 hours per person (lab/practice-related departments)

◉ Status of OSH Education and Training for Faculty, Staff, and Students

Year	Number of Training Sessions	Number of Participants
2022	26	2,715
2023	25	2,894
2024	12(new student training delivered online)	1,619

Faculty and Staff Health Maintenance

To safeguard the safety, health, and well-being of the University's workforce and to prevent the occurrence of emerging occupational diseases such as musculoskeletal disorders and psychological stress, National Formosa University implements the Health Service Program. The program is structured around the principle of cultivating healthy lifestyles among faculty, staff, and students, integrating health into daily life, and creating a culture of well-being, with the long-term goal of building a Health-Promoting University as a sustainable development model. The program encompasses three main areas: health protection, health promotion, and the implementation of four key workplace safety factors.

一、The following measures are carried out under health protection:

Health Examinations and Follow-Up Referrals

In accordance with Article 20 of the Occupational Safety and Health Act and the Regulations on Labor Health Protection, the University has established a health examination program. New employees undergo physical examinations, while current employees receive regular or position-specific health checks, including physical and periodic exams, special health examinations for high-risk operations, and other designated health checks mandated by central authorities.

If abnormal results are identified, the University provides health education and requires follow-up appointments in three or six months as instructed by occupational physicians. Each abnormal case must complete at least one follow-up.

On-Site Health Services

To ensure the physical and mental well-being of faculty and staff and to cultivate healthy habits, the University collaborates with Changhua Hospital of the Ministry of Health and Welfare. Occupational physicians visit campus approximately every two months (six times annually, each for three hours). On-site services include consultations on health examination reports and personal health concerns, enabling faculty and staff to manage their health based on medical advice. In addition, occupational physicians inspect workplaces and provide improvement recommendations, thereby enhancing workplace safety for all.

AED Deployment and Training

The University has deployed 10 AEDs across its three campuses and dormitory areas. In 2024, management and training activities were conducted as follows:

- Regular maintenance every six months.
- AED electrode pads were replaced in May 2024.
- AED batteries in the Electrical Engineering Building and Administration Building were replaced in September 2024.
- A total of 6 AED + CPR training sessions were organized, with 15 participants enrolled and 19 completing the training, achieving a 100% certification rate for AED managers.

AED Deployment and Training Status (2024)

Maintenance Cycle	Every six months (AED electrode pads replaced, AED batteries replaced)
Training	100% certification rate for AED + CPR management training 4 training sessions held, 120 participants certified
AED Safety Certification and Photos	 Certified on February 2, 2024, at Male Dormitory II

2. Health Promotion

In the area of health promotion, the University also organizes a variety of activities on an irregular basis. These include Tai Chi group practice classes, health promotion lectures, Tuesday Vegetarian Day programs, influenza vaccinations for faculty and staff aged 50–64, yoga courses, and the “Sports Love Taiwan” program, among many other initiatives designed to enhance health promotion and prevent health risks.

Activity	Sessions / Participants
HIV and Tobacco Prevention	3 sessions, 85 participants
Traffic Safety Awareness	1 session, 23 participants
Tuesday Vegetarian Day Program	1 session, 43 participants
Influenza Vaccination for Faculty and Staff Aged 50–64	1 session, 43 participants
Tuesday Pilates and Yoga Classes	52 sessions, 1,690 participants
Thursday Zumba and Yoga Classes (Self-Paid)	20 sessions, 500 participants
“Sports Love Taiwan” Program	50 sessions, 1,571 participants
Breast and Cervical Cancer Screening for Female Faculty and Staff	1 session, 58 participants
COVID-19 (XBB) Vaccination for Faculty and Staff	1 session, 10 participants
Friendly Campus Anti-Bullying and Human Rights Education	5 sessions, 91 participants
Fire Drill	1 session, 4 participants
Self-Care and Positive Resilience Workshop	1 session, 17 participants
Dengue Fever Prevention	1 session, 41 participants
Morning Baduanjin Tai Chi (Self-Practice Group)	Weekly (average 20 participants)
High-Temperature Operation Prevention Course	1 session, 40 participants
Campus Bullying Workshop	1 session, 39 participants

3. Implementation of the Four Major Occupational Safety and Health Programs
In accordance with the Occupational Safety and Health Act, National Formosa University has established four major occupational safety and health programs:

1.Ergonomic Hazard Prevention Program (National Formosa University Human Factors Hazard Prevention Program)
2.Prevention Program for Diseases Induced by Abnormal Workload (National Formosa University Abnormal Workload-Induced Disease Prevention Program)
3.Prevention Program for Unlawful Infringement During the Execution of Duties (National Formosa University Program for Preventing Unlawful Infringement While Performing Duties)
4.Maternal Health Protection Program for Female Workers (National Formosa University Maternal Health Protection Program for Female Employees)

Program	Implementation Status
Ergonomic Hazard Prevention Program	1 case received, processed and closed.
Prevention Program for Diseases Induced by Abnormal Workload	Data collected and promoted through questionnaires and on-site services. In 2024, 3 individuals with high-risk scores were interviewed by occupational physicians; no cases required further filing after interviews.
Prevention Program for Unlawful Infringement During the Execution of Duties (excluding sexual assault and harassment)	1 case received; facts were clarified, meetings were convened, and mediation was achieved. Case closed.
Maternal Health Protection Program for Female Workers	17 cases received in 2024. Each case was provided with individualized prenatal health education, maternity care, postpartum health education, and childcare consultation by occupational health nurses. Workplace site visits were conducted during pregnancy. On-campus breastfeeding rooms (including lactation guidance) were provided, and follow-up support was offered for return-to-work after maternity or parental leave.


Healthy Vegetarian Activities


Dengue Fever Prevention


Rumba Yoga Class


Female Staff Health Programs


Influenza Vaccination


Qigong – Morning Practice of Eight-Section Brocade

Healthy Workplace Certification – Health Promotion Badge (Valid for 2 Years)

AED Safe Site Certification (Valid for 2 Years)

Student Health Maintenance

To enhance students' physical and mental health and strengthen the promotion of school health services, National Formosa University has established the Health Committee, the Health Care Unit, and the Student Counseling Center, among other units. These units are responsible for: handling emergency accidents and wound care, conducting new student health examinations, tracking and managing students with abnormal health conditions, implementing health promotion programs, establishing collaborations with designated campus hospitals and clinics, organizing health and safety education activities and first-aid training, providing counseling and mental health education, and promoting psychological health awareness. Various health maintenance activities are held throughout the year.

The student health maintenance activities for 2024 are summarized in the table below.

◉ Statistics of Health Maintenance Activities

Item	Sessions / Participants
New Student Health Check-ups	4 sessions, 3,084 participants
Vaccination	1 session, 146 participants
First Aid Education	4 sessions, 107 participants
Health Promotion Program Activities	81 sessions, 7,700 participants
Psychological Counseling and Guidance	Group counseling: 52 sessions, 287 participants Individual counseling: 327 students, 2,587 visits
Smoking Cessation Program	4 sessions, approx. 40 participants
Tobacco, Drug, and HIV/ AIDS Prevention	4 sessions, 294 participants
Blood Donation Activities	5 sessions, 1,533 donors
Hand-in-Hand Sex Education Service	9 sessions, 670 participants

AED and First Aid Training


Influenza Vaccination


Health Promotion – Healthy Body Weight Program

Tobacco, Drug, and HIV/AIDS Prevention


New Student Health Check-up


Campus Smoking Cessation Program

Sports Activities

To promote students' physical and mental health and to fulfill SDG 3: Good Health and Well-being, National Formosa University continues to advance the vigorous development of campus sports, aiming to cultivate students' lifelong exercise habits.

Through participation in various sports activities, students can enhance healthy lifestyle practices, strengthen self-confidence and self-worth, and at the same time develop effective time management and stress-coping abilities.

◉ Sports Activities Organized in 2024

Type of Sports Activity	Number of Participants
Basketball	220
Volleyball	220
Table Tennis	17

Type of Sports Activity	Number of Participants
Badminton	114
University-wide Tug-of-War Competition	110
Anniversary Sports Day	215


Interdepartmental Basketball Cup


Interdepartmental Badminton Cup


Interdepartmental Volleyball Cup

Freshmen 3-on-3 Basketball Cup


Anniversary Sports Day


Freshmen Table Tennis Cup


Freshmen Badminton Cup


Anniversary Sports Day


Interdepartmental Tug-of-War Competition

Group Photo: University President and Participating Teams


National Intercollegiate Athletic Games – Participating Teams


Teams' Entrance


Tennis Award Ceremony


Tennis Award Ceremony

Achievements at the 2024 National Intercollegiate Athletic Games and University Leagues

Event	Award
National Intercollegiate Athletic Games – Men's Open High Jump	Gold Medal (New National Record)
National Intercollegiate Athletic Games – Men's Open Hammer Throw	Gold Medal, Silver Medal
National Intercollegiate Athletic Games – Men's General Triple Jump	Gold Medal
National Intercollegiate Athletic Games – Men's General Tennis Singles	Silver Medal
National Intercollegiate Athletic Games – Women's General Tennis Singles	Bronze Medal
National Intercollegiate Athletic Games – Women's General Soft Tennis Singles	Silver Medal
National Intercollegiate Athletic Games – General Mixed Doubles Soft Tennis	Silver Medal

Note: Due to the large number of awardees, only the top 3 are presented.

4 Excellence in Teaching and Research

Material Topic Management

Dimension	University Governance
Material Topic	Teaching Quality and Learning Outcomes Student Internships and Career Guidance
Corresponding GRI Standards	Custom Topic
Corresponding SDGs	
Policies and Commitments	1. To enhance teaching quality and establish distinctive teaching characteristics, the University not only strengthens professional knowledge but also actively integrates teaching resources, reinforces general education and language proficiency, and promotes diverse arts and cultural performances. Furthermore, it advances international academic exchange and collaboration, with the goal of cultivating students to become well-rounded and high-quality talents. 2. To strengthen practical connections and industry–academia collaboration, the University emphasizes social responsibility in jointly nurturing talent with industries. By fostering close cooperation with enterprises, promoting industry internships, and solidly enhancing students' practical abilities, the University ensures that learning content is closely aligned with industry practices. This approach reduces the gap between academic learning and workplace application, enabling students to gain early exposure to professional environments and improve their employability.
Goals	1. Encourage faculty to engage in innovative course design, guiding them to apply diverse teaching models to achieve teaching innovation and enhance both teaching quality and learning outcomes. 2. Assist students with career exploration, career planning guidance, and access to employment and internship opportunities, helping them develop clearer career paths and practical connections to the job market.
Grievance Mechanism	・Campus App “I Want to Report” ・Student Rights Assembly
Actions and Achievements	1. 14 faculty members recognized as Outstanding or Excellent Teachers, including those with Excellence in Research Performance. 2. 865 students participated in off-campus internships; 2,215 students received awards or professional certifications; multiple career development activities were organized. 3.A total of 369 special feature courses were offered, with 11,868 enrollments. 4. 214 continuing education classes were opened, with 3,774 enrollments. 5. 379 general education courses were designed with SDG integration, with 20,098 enrollments. 6. 225 language education courses were offered, with 11,827 enrollments. 7.Faculty published 212 journal papers, 373 conference papers, and 26 other works; students produced 441 papers. 8.245 industry–academia collaboration projects, 43 patent applications, and 31 technology transfers were completed. 9.Hosted 91 international students; established partnerships with 80 sister universities; organized multiple international exchange activities.

4-1 Student Internships and Employment

SDGs 8
SDGs Sub-Targets 8.3

Student Internships and Professional Certification

To cultivate professional and technical talents with practical skills, innovation, and employability, the University strengthens practical connections and industry–academia collaboration, thereby enhancing the social responsibility of jointly nurturing talent between industry and academia. By reinforcing close cooperation with enterprises, promoting industry internships, and solidly improving students' hands-on abilities, the University ensures that learning content aligns with industry practices. This reduces the gap between academic learning and workplace application, allowing students to gain early workplace experience and improve their employability.

The University also emphasizes and supports the acquisition of professional certifications. In 2024, five categories of iPAS certification examinations were hosted on campus. The University continues to offer specialized certification preparation courses and ISO international certification programs, assisting students in obtaining certifications and rewarding those who succeed. Students are encouraged to actively participate in certification exams and competitions to strengthen their professionaland technical skills. Certifications are further integrated into academic programs, with certain certifications set as program completion requirements, thereby establishing a comprehensive certification counseling and support mechanism.

Status of Student Internships

Academic Year	Number of Interning Students
111	700
112	865
113	860

Students' Certification and Award Achievements

Academic Year	Number of Students Obtaining Professional Certifications	Number of Awardees / Awards in Competitions
111	1,834	187
112	2,215	185
113-1	1,135	120

National Industrial Skills Competition

Career Development

The University has established a Career Development Center to support both current students and alumni in career planning and to ensure a seamless transition to employment, thereby achieving the goal of “integrating learning with practice.”
During their studies, students can access the Career Development Center for career exploration analysis, career planning guidance, counseling on career-related issues, and assistance in securing internship and employment opportunities. Alumni can also utilize the Center to obtain the latest industry information and further receive career counseling and employment support.
Through these services, both students and graduates are able to gain a clear understanding of the job market, strengthen their employability, and achieve a smooth connection between their academic learning and professional careers.

◉ 2024 Career Development Achievements

Program / Activity	Outcomes
Student Internship Matching Services	75 companies offered internship opportunities for student matching
Job Vacancy Database Announcement	Over 410 cooperative industry partners 75 industry mentors engaged
Yunlin Campus Job Fair	117 company booths ~3,800 job vacancies released 2,035 student résumés submitted 783 preliminary matches achieved
Corporate Information Sessions, Exhibitions, Company Visits, and Industry Mentor Workshops	55 sessions
Career Analysis and Planning Lectures	24 lecture courses offered
Taichung Machine Tool Cup – CNC Multi-Axis Skills Competition	284 participants
National Industrial Skills Competition	238 participants

Company Visits & Exhibition Tours


Taichung Machine Tool Cup – CNC Multi-Axis Skills Competition


113th Academic Year Campus Job Fair

Graduate Destination Survey

To understand the post-graduation pathways of students, the University conducts an annual telephone survey to collect statistical data on graduates' status, including whether they pursue further studies or enter the job market.

Graduate Destination Survey Table – Master's and Doctoral Programs

Academic Year	No. of Graduates	Responses Collected	Response Rate %	Graduate Destinations				
				Employment	Further Study	Military Service	Unemployed	Others
108	416	400	97.56	58.75	1.50	31.75	3.53	4.47
109	414	385	93.00	61.82	1.56	28.05	3.81	4.76
110	342	334	97.66	55.69	0.90	31.14	4.22	8.05
111	464	461	99.35	49.46	1.30	30.37	4.96	13.91
112	441	440	99.77	49.09	0.91	32.27	4.82	12.91

Note: As the graduate destination survey is conducted one year after graduation, the latest available data has been updated to 2024.

Graduate Destination Survey Table – Undergraduate Programs

Academic Year	No. of Graduates	Responses Collected	Response Rate %	Graduate Destinations				
				Employment	Further Study	Military Service	Unemployed	Others
108	2164	2056	95.01	38.23	22.76	26.95	5.42	6.64
109	2317	2156	93.05	38.59	24.54	23.52	5.64	7.71
110	2288	2170	94.84	37.00	25.48	26.91	5.17	5.44
111	2323	2195	84.94	39.23	28.61	21.41	5.11	5.64
112	2245	2096	93.36	34.31	29.91	23.47	5.22	7.09

Note: As the graduate destination survey is conducted one year after graduation, the latest available data has been updated to 2024.

4-2 Teaching Quality

SDGs 1~17

SDGs Sub-Targets 4.4、4.6、12.8

To enhance teaching quality and establish distinctive educational features, the University not only strengthens professional knowledge but also actively integrates teaching resources to provide a high-quality campus life for students. Efforts include strengthening general education, improving language proficiency, and promoting diverse arts and cultural performances to enrich the campus's humanistic atmosphere. The University also advances international academic exchanges and collaborations to cultivate well-rounded talents with professional expertise, language proficiency, artistic appreciation, creativity, leadership, communication, expression, analytical thinking, and a global perspective.

Featured Teaching Programs

Interdisciplinary Programs

The University continues to encourage colleges and academic units to develop interdisciplinary programs. Currently, 23 integrated programs have been established across colleges and departments, providing diverse opportunities for interdisciplinary learning. In addition, the University is progressively expanding micro-credit programs in digitaltechnology and programs under industry colleges, enabling students to seamlessly transition into the workforce upon graduation.

Adaptive Learning

Adaptive learning with flexible credits is offered through four modes: micro-credit courses, self-directed learning, deep-bowl courses, and interdisciplinary credit courses. By leveraging flexible systems and adaptive learning mechanisms, students are guided to integrate professional practice projects into their studies, enhancing their self-learning ability and cultivating a vibrant, diverse learning environment on campus.

Cross-Disciplinary Learning

To strengthen students' cross-disciplinary learning and encourage faculty to adopt diverse teaching models, the University has introduced the “15+3 Weeks Cross-Disciplinary Learning Program.” Under this approach, the regular semester teaching schedule is condensed to 15 weeks, while 3 additional weeks are allocated for cross-disciplinary learning. Faculty may incorporate innovative teaching, practical integration, and field-based learning, thereby broadening interdisciplinary opportunities for students.

Innovative Teaching

Faculty are encouraged to design innovative courses by integrating various teaching approaches. These include addressing classroom challenges, adopting appropriate research methods and assessment tools, applying STEM education concepts, developing industry-academia collaborative teaching cases, and implementing innovative teaching in USR (University Social Responsibility) field projects. Such initiatives enhance faculty teaching capacity, improve instructional effectiveness, and foster students' cross-disciplinary learning, problem-solving, self-directed learning, and general education competencies.

Teaching Practice Research Projects

The University actively promotes the Ministry of Education's Teaching Practice Research Projects by regularly organizing experience-sharing events, master lectures, and workshops. Faculty are encouraged to identify and analyze teaching-related issues and apply suitable methods and tools in the classroom. Effectiveness of implementation is assessed to monitor improvements in teaching quality and student learning behavior, providing feedback for future teaching development.

Required Courses under the College of Humanities and Sciences

These courses adopt a mixed-class approach that integrates students from different departments and disciplines. Faculty and industry mentors collaborate with students to explore regional issues, engaging with NPO workers and social enterprise experts. Through problem-based learning, interactive practice, and off-campus teaching, students integrate their professional expertise with knowledge, technology, and resources to identify local features and collaborate with the community in addressing urgent regional challenges. At the end of the semester, a Final Project Exhibition is held, where outstanding works are selected and awarded.

Featured Teaching Courses – 2024 Overview

Course Type	Number of Courses/Programs	Number of Participants
Interdisciplinary Programs	23 interdisciplinary programs	
Adaptive Learning (Micro-Credit, Self-Directed Learning, Deep-Bowl Courses, Interdisciplinary Courses)	Micro-Credit: 64 Self-Directed Learning: 41 Deep-Bowl: 42 Interdisciplinary: 1	Micro-Credit: 1,137 Self-Directed Learning: 1,013 Deep-Bowl: 1,573 Interdisciplinary: 21
15+3 Weeks Cross-Disciplinary Courses	64	2,764
Innovative Teaching Courses	97	4,255
Teaching Practice Research Projects	17	548
College of Humanities and Sciences Required Courses	10 Innovative & Entrepreneurial Literacy 10 Local Engagement Practice	557

Self-Directed Learning Course – Roaming Bengang: Participating in Local Activities (Mazu Pilgrimage) to Gain In-Depth Understanding of Local Religious Culture

Micro-Credit Course – Liquid Crystal Bio-Temperature Sensor: Student Practice in Fabricating Liquid Crystal Bio-Temperature Sensor Samples

Students utilized 3D printing to create prototype models for innovative design improvements. Through the course, scientific and technological education was implemented, integrating STEM interdisciplinary learning to cultivate students' abilities in critical thinking, innovation, and problem-solving.

Ecological Observation of Giant Clams: Students conducted close-up observations of marine organisms, allowing them to gain first-hand experience and a better understanding of fundamental principles and phenomena in marine biochemistry.

In-class Role-Playing Practice: Students engaged in hands-on role-playing activities. Through a series of virtual role-play demonstrations in applied foreign languages, the course guided students to gain an in-depth understanding of the entire process of virtual character creation.

Instructor-Guided Learning: In class, the instructor guided students to enhance their understanding, with the course aimed at cultivating students' ability to control single-chip microcontrollers (8051).

Industry Expert Lecture: An expert from Han Rui Tai Industrial Co., Ltd. was invited to share insights. The main objective of this course was to provide an in-depth understanding of the application of smart manufacturing and AI technologies in digital manufacturing, with particular focus on machinery life cycle management and five-axis machining technology.

Exhibition of Student Works from College Required Courses – 1st Semester, Academic Year 113
HAPPY ENDING!!

Practical Vehicle Diagnostics and Repair: Students used automotive diagnostic instruments, multimeters, automotive oscilloscopes, and other equipment to inspect real vehicles, identify malfunctions, and carry out troubleshooting. Through this practice, they acquired fundamental skills in vehicle maintenance and repair.

Exhibition of Student Works from College Required Courses – 1st Semester, Academic Year 113
Committee Members Giving Feedback.

Exhibition of Student Works from College Required Courses – 1st Semester, Academic Year 113
Student Work 1: “Tranquility of Gaolin”

Exhibition of Student Works from College Required Courses – 1st Semester, Academic Year 113
Student Work 2: “Handmade Christmas Paper Dolls”

Exhibition of Student Works from College Required Courses – 1st Semester, Academic Year 113
Judges Evaluating Each Work and Listening to Student Presentations (1)

Exhibition of Student Works from College Required Courses – 1st Semester, Academic Year 113
Judges Evaluating Each Work and Listening to Student Presentations (2)

Extending Learning Beyond Campus: Enriching Life Experiences

In alignment with Ministry of Education policies and in response to evolving societal needs, the University transformed its common required course “Service Learning” into “Social Responsibility Practice Education” in 2023. The aim is to cultivate students' sense of local care, sustainability perspectives, and the ability to integrate professional knowledge with practical applications. The course is structured into three major dimensions: Practical Education, Caring Education, and Environmental Education, supported by an incentive system. The program continues to integrate SDGs into course content, deepening students' engagement with local communities and strengthening the effectiveness of learning in practice.

1 Caring and Environmental Education

Moving beyond traditional labor-based service learning, courses now emphasize integrating knowledge, skills, and resources to design diverse volunteer service projects in collaboration with disadvantaged groups and non-profit organizations. Focusing on SDG 3 (Good Health and Well-being) and SDG 17 (Partnerships for the Goals), a total of 3,083 students enrolled during the transition period. In 2024, the University signed cooperation agreements with 39 NGOs, enabling 1,113 student participations in off-campus institutions, reflecting students' commitment to local care and social issues.

2 Practical Education

Through teacher-guided autonomous learning, students cultivate practical engagement with local communities, fulfilling the University's social responsibility. Course design integrates SDG targets into curricula and applies USR-based pedagogies that combine theory with real-world applications. Students are guided to explore issues in on- and off-campus sites, apply their professional knowledge, and propose solutions to local problems.

- In Academic Year 112, 32 courses were offered with 1,438 student enrollments, aligned with SDGs 4, 6, 8, 9, 11, and 12.
- Students and faculty participated in 45 site visits, with 1,843 person-times from NFU and 48 external participants.
- Engagement sites included Huwei Sugar Factory and historical buildings, Joint Office Building, Huwei District Office, Huwei Land Office, Tongxin Park, Huwei Iron Bridge, Lin Ji Juice, Organic Kitchen, Huwei Brewery, Huwei Railway Station, Yunlin Memory Cool, Jianguo Military Dependents' Village, DouliuQuan Hong Environmental Biotechnology Co., Ltd., Dalin Taliwu Cultural Park, and Xiluo Ruichun Soy Sauce Factory, among others.
- These initiatives showcased student contributions to solving local challenges through experiential learning.

◉ Course Highlights:

- **Cultural Heritage Exhibition Practice:**
Using PBL, students translated cultural heritage into learning projects, focusing on sugar industry heritage. They engaged in observation, thematic analysis, exhibition planning, and curatorial practice, reinterpreting the sustainable significance of sugar culture to urban and rural development.
- **Life Cycle of Domestic Water Use:**
With PBL, students studied water quality and its influence on Yunlin's coffee industry, exploring water improvement strategies for residents and businesses, linking water resource protection with sustainable local economic development.
- **IoT and Smart Living:**
Using CDIOT and design thinking, students applied IoT knowledge to local history archives. Through puzzle-solving games, they identified local challenges, designed solutions, and combined technology with crafts to enhance cultural value and link heritage with smart living.
- **Materials Recycling and Marketing:**
Hands-on learning encouraged students to redesign and produce recycled materials into marketable products, integrating environmental awareness with practical promotion.

3 Incentive System

To encourage volunteer engagement, the University established the “Tiger Power Sustainable Practice Award” in Academic Year 112. This award recognizes students who voluntarily plan and complete 100 or 200 hours of service at institutions before graduation. In 2024, 11 students were honored as the first award recipients.

“Cultural Heritage Exhibition Practice” – Exhibition Setup Completed at Huwei Station

“Life Cycle of Domestic Water Use” –
On-site Learning in Water Quality Analysis

“IoT and Smart Living” –
Yunlin Memory COOL Real-World Puzzle Game

“Materials Recycling and Marketing” –
Student Works Created from Recycled Wood

“Agricultural Product Value-Added Innovation” –
Group Discussion on the Potential of Agricultural Products in Advancing SDG-related Issues

“Taiwan Yunlin Cultural Heritage Tour” –
On-Site Visit to the Huwei Corridor through Real-World Puzzle Solving

“Cultural and Creative Practice” –
Field Survey of Practice Sites and Discussion with the Museum Director on On-Site Challenges

“Design Thinking Practice” –
Group Discussions on Solutions to Field Problems

“Cultural Heritage Education and Practice” –
Explanation and Discussion on Military Dependents' Village Cultural Imagery

“Cultural Heritage Education and Practice” –
Students Gaining Hands-on Experience in Revitalization through Participation in the Village of Light Event

2024 Graduating Students Awarded the Tiger Power Sustainable Practice Award

Extension Education

Extension education at the University is centrally planned and coordinated by the Center for Extension Education under the Division of Continuing and Extension Education. The main areas of work include credit and non-credit extension programs, the Ministry of Education's Senior Learning University Program, the Ministry of Labor's vocational training programs, and extension programs commissioned by the Yunlin County Government, such as the Huwei River Community University and the Farmer's University.

All extension programs leverage the University's existing faculty expertise and facilities to promote various technical disciplines. The University also accepts commissions from government agencies—such as the Industrial Development Bureau and the Workforce Development Agency of the Ministry of Labor—as well as enterprises, to offer specialized technical training programs.Additionally, community university courses are commissioned by county governments.

By utilizing its abundant administrative and teaching resources, the University proactively extends extension education throughout the Yunlin and Chiayi regions, working closely with local governments and communities. In response to economic transformation and industrial upgrading, the University organizes programs tailored to local characteristics and industrial training needs, maximizing the integration and impact of its rich teaching resources. Notably, the University's achievements in extension education were recognized with the Bronze Award in the 2023 Talent Quality-management System (TTQS) evaluation conducted by the Ministry of Labor (valid for two years).

In alignment with government policies promoting lifelong learning and adult education, and in the era of the knowledge economy, the University assists local residents in continuously adapting to rapidly changing social environments by regularly offering diverse technical courses.

The recent achievements of extension education are summarized as follows:

Extension Education Credit Programs

Academic Year	Classes Offered	Number of Participants (Enrollments)
109	15	292
110	11	155
111	9	166
112	15	312

Extension Education Non-Credit Programs

Academic Year	Classes Offered	Number of Participants (Enrollments)
109	40	993
110	43	1,025
111	42	1,002
112	53	1,283

Industry–Academia Cooperative Extension Education Programs (Including Training Programs)

Academic Year	Classes Offered	Number of Participants (Enrollments)
109	20	837
110	25	944
111	31	947

Ministry of Labor Vocational Training Programs

Academic Year	Classes Offered	Number of Participants (Enrollments)
109	5 Key New Industries + 1 Talent Development Program	121
110	3 Key New Industries + 1 Talent Development Program	82
111	4 Key New Industries + 1 Talent Development Program	90
112	5 Key New Industries + 1 Talent Development Program	75

Extension Ministry of Education Senior Learning University

Academic Year	Classes Offered	Number of Participants (Enrollments)
109	1	35
110	1	27
111	Cancelled for Insufficient Enrollment	-
112	Cancelled for Insufficient Enrollment	-

Yunlin County Huwei River Community University

Academic Year	Classes Offered	Number of Participants (Enrollments)
109	158	2,800
110	138	2,098
111	143	2,229
112	128	1,937

Farmer's University

Academic Year	Classes Offered	Number of Participants (Enrollments)
109	6	408
110	5	161
111	4	181
112	12	167

General Education

To clearly promote liberal general education courses, the University established the Center for General Education (a first-level academic unit). With the vision of cultivating well-rounded talents who meet the needs of society and industry, the Center aims to nurture graduates who can respond to the challenges of globalization, meet the demands of industrial innovation, embody multicultural characteristics, and strengthen connections with local communities.

From the student perspective, the program aspires to cultivate young people with broad vision, rich knowledge, strong self-discipline, and a commitment to continuous growth.

General education courses are divided into four core learning areas:
1.Creative Thinking and Self-Exploration
2.Arts and Cultural Literacy
3.Technology and Civic Society
4.Nature and Sustainable Environment

Statistics of General Education Courses and Activities in 2024

Course / Activity	Number of Courses	Number of Participants
General Education Courses	308	16,559
Calculus Courses	71	3,539
General Education Lectures	40	19,880

Integration of General Education with SDGs — “Sustainable Development Literacy Program”

Guided by the human-centered and service-oriented spirit of the University's general education, the goal of cultivating students' interdisciplinary literacy, social responsibility, and civic awareness aligns closely with the United Nations Sustainable Development Goals (SDGs). As SDGs address global issues spanning the economy, society, and environment, integrating them into general education equips students with knowledge and understanding of sustainable development, thereby enhancing their awareness of social and environmental challenges and encouraging their contributions to sustainable solutions.

Specifically, the University's general education is characterized by interdisciplinary course design and cross-college participation. Beginning in Academic Year 2023 (ROC 112), the University became the first in Taiwan to launch the “Sustainable Development Literacy Program,” coordinated by the Center for General Education. This program enables students to learn the background, significance, and objectives of the SDGs, while further exploring the related social, economic, and environmental challenges—such as poverty, hunger, climate change, energy, water, health, education, gender equality—and analyzing their impacts on different groups and potential solutions. Through course design and experiential learning activities, students are encouraged to engage in interdisciplinary practices and volunteer services related to sustainability, such as environmental protection activities, community development projects, and public service initiatives.

In addition, the program highlights the connection between SDGs and ESG (Environmental, Social, and Governance) issues, which are central to how investors and industries evaluate performance and long-term value. The curriculum not only raises students' awareness of ESG, but also cultivates their ability to address sustainability and ESG concerns in their future careers. This prepares them to make meaningful contributions to society, the environment, and corporate development.

Accordingly, the program combines general education sustainability courses (linked to SDGs) with professional sustainability courses (linked to ESG), with the aim of fostering global sustainability awareness, civic responsibility, and the capacity to make responsible decisions and actions aligned with sustainability principles in daily life.

The Sustainable Development Literacy Program is planned by the Center for General Education and implemented collaboratively with each college. The curriculum includes both general education sustainability courses and professional sustainability courses. Courses are subject to a certification process aligned with the 17 SDGs and are incorporated into the course selection system based on faculty applications and teaching willingness.

Highlights:

1.The first university in Taiwan to establish a Sustainable Development Literacy Program led by the Center for General Education.

2.Innovative course design: Traditional general education courses were redesigned to incorporate at least six weeks of content directly linked to the 17 SDGs, with a sustainability course certification system established to ensure that course content fulfills SDGs education.

3.Publication of the “Sustainable Development Literacy Program Reference Guide” and “SDGsology – General Education Newsletter”, providing clear documentation of the University's practices and achievements in embedding SDGs into general education.

Reference Guidebook for the Sustainable Development Literacy Program

Integration of SDGs into General Education and the Sustainable Development Literacy Program

Through the interwoven approaches of individual work, collaboration, thematic focus, and field-based practice, the University has proposed diverse strategies, including:
1.Theme-based implementation in a single course
2.Theme-based collaboration across multiple courses
3.Field-based implementation in a single course
4.Field-based collaboration across multiple courses
Faculty members examine the alignment between course content and the SDGs, which serves as a criterion for integrating SDG elements as well as a reference for developing new general education courses. Without compromising the spirit of general education or the original course design objectives, existing course modules are reviewed to identify units and themes that can be connected to the SDGs, thereby providing anchor points for integration and course design.
In line with the promotion of the Sustainable Development Literacy Program, the University has also established a sustainability course certification mechanism. Courses that undergo review and approval by the Center's Curriculum Committee are certified as program courses under this initiative.

Number of Core Courses Involving SDGs

(★)	★Courses Involved

1 消除貧窮	2 消除飢餓	3 良好健康與福祉	4 優良教育	5 性別平等	6 潔淨水與衛生
(6)	(2)	(18)	(24)	(21)	(6)

7 可負擔的潔淨能源	8 尊嚴就業與經濟發展	9 產業創新與基礎建設	10 減少不平等	11 永續城市與社區	12 永續消費與生產
(0)	(14)	(4)	(22)	(13)	(14)

13 氣候行動	14 水下生命	15 陸域生命	16 和平正義與有力的制度	17 夥伴關係	18
(8)	(6)	(10)	(9)	(13)	(9)

Number of Extended Courses Involving SDGs

(★)	★Courses Involved

1 消除貧窮	2 消除飢餓	3 良好健康與福祉	4 優良教育	5 性別平等	6 潔淨水與衛生
(2)	(0)	(10)	(15)	(12)	(1)

7 可負擔的潔淨能源	8 尊嚴就業與經濟發展	9 產業創新與基礎建設	10 減少不平等	11 永續城市與社區	12 永續消費與生產
(2)	(9)	(2)	(15)	(6)	(8)

13 氣候行動	14 水下生命	15 陸域生命	16 和平正義與有力的制度	17 夥伴關係	18
(8)	(6)	(10)	(9)	(13)	(9)

Integration of SDGs into General Education

Introduction to Environmental Science

This course focuses on accessible, fundamental scientific knowledge related to the environment, covering issues such as air, climate, energy, water, and waste. With the integration of the SDGs, the course not only strengthens the environmental dimension but also emphasizes its connections to social and economic aspects. By incorporating videos and current affairs related to sustainable development both in Taiwan and abroad, students are guided to reflect on the interrelationship among the environment, society, and economy.

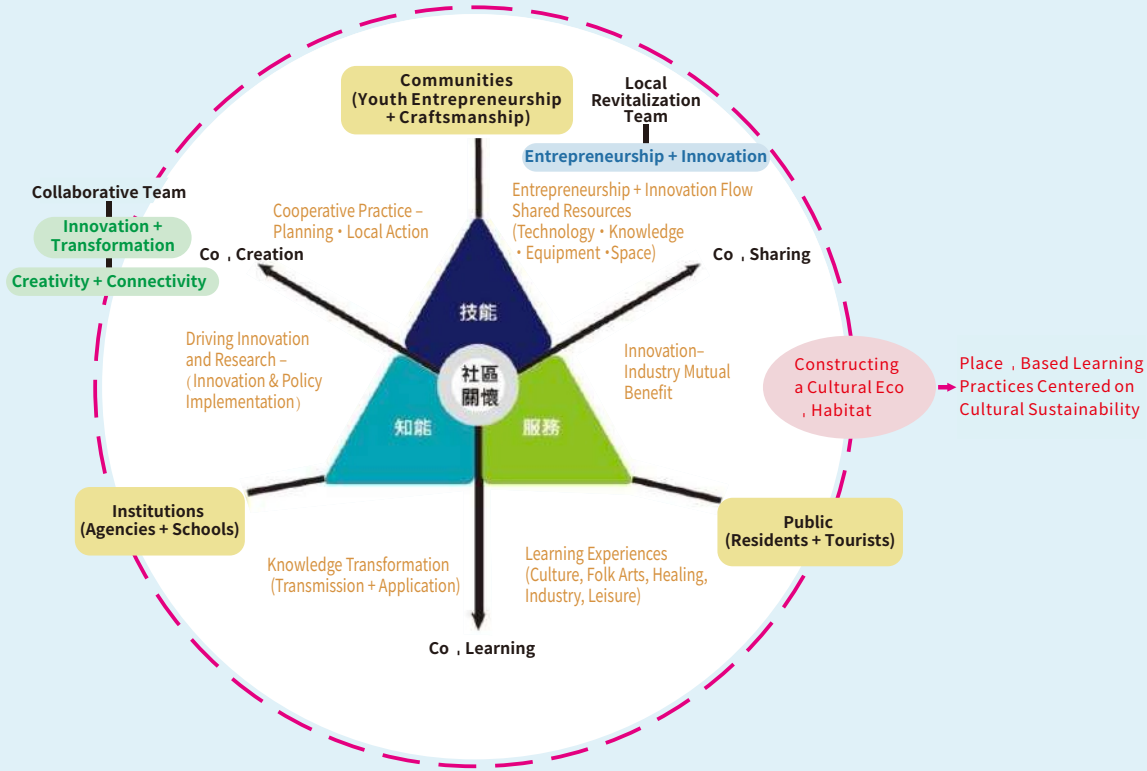
Through hands-on projects and experiential activities, the course encourages “learning by doing,” helping students realize the importance of action in achieving the SDGs while inspiring them to imagine additional ways to take action.

The central theme of the course is Environmental Justice, which is taught collaboratively with other general education courses such as Introduction to Philosophy and Introduction to Law. In these sessions, students are introduced to the environmental dimension of environmental justice and its related knowledge.

Cultural Sustainability and Community Care

With cultural sustainability as its core concept, this course establishes a learning framework through the three dimensions of sustainable development: ecology, daily life, and production. It offers experiential learning in community contexts, guiding students to explore the historical trajectories of Yunlin's sugar industry culture, military dependents' village culture, and new immigrant cultures.
Through this process, students gain a deeper understanding of how community cultural sites embody the three pillars of sustainability while also learning to interpret and translate these dimensions academically. By applying what they have learned, students are encouraged to put into practice genuine care for their local communities and hometowns.

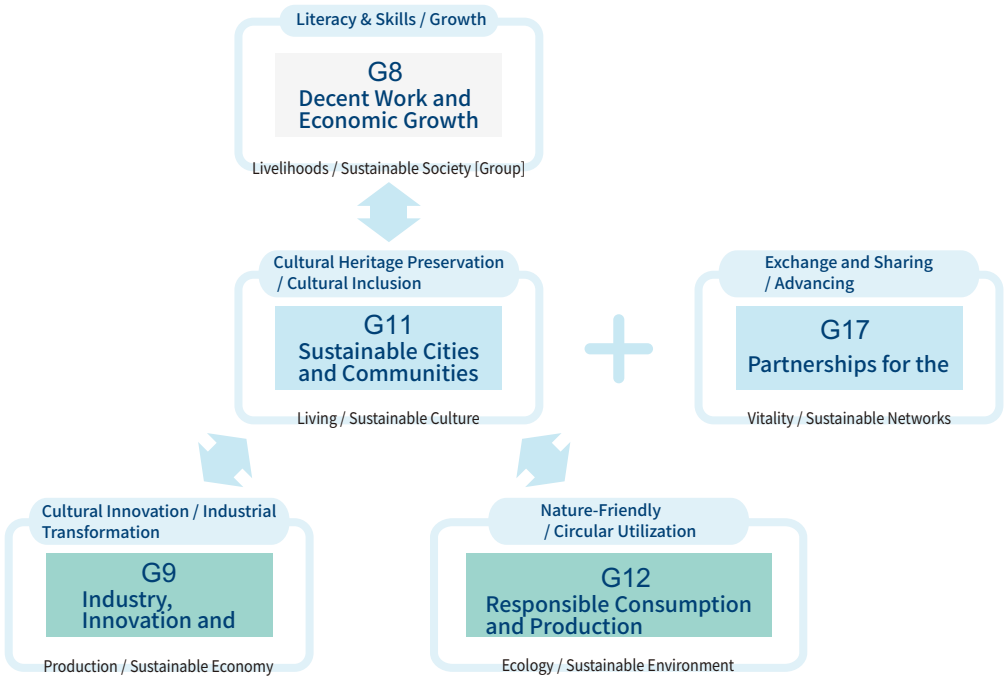
Course Implementation Framework Diagram



Overview of SDG-Integrated General Education Courses

Cultural Sustainability and Community Care

Interdisciplinary Practice of Cultural Sustainability



Note: The outcomes shown here are excerpts from two courses that demonstrate the integration of SDGs.
For the full list of courses, please refer to “SDGsology – General Education Newsletter.”

Integration of SDGs into General Education – Featured Course Videos

Introduction to Environmental Science

Course Instructor: Yu-Long Chao

Cultural Sustainability and Community Care

Course Instructor: Shih-Che Huang

Video

SDGs Faculty Development Community

To strengthen teaching capacity and enhance instructionalquality, National Formosa University has established an SDGsFaculty Development Community, primarily composed ofinstructors offering general education courses. This communityserves as a collaborative platform for professional growththrough learning and experience-sharing centered aroundthe United Nations Sustainable Development Goals (SDGs).

The community operates through a diverse range of activities, including:

- Educational visits
- Guest lectures
- Reading groups
- Professional development workshops
- Hands-on experiential learning
- Teaching demonstrations and sharing sessions

On April 9, 2024, National Formosa University hosted a specialacademic dialogue featuring Secretary-General Shu-Erh Lin of theTaiwan Public Interest CEO Association and Professor Bin-Feng Yenof our university. The discussion was titled: “Academic Practice ofLocal Knowledge: Huwei Sugar Town as a Cultural Pathway”

On May 8, 2024, National Formosa University invited AssociateProfessor Shu-Min Chen from National Tsing Hua University to delivera special lecture titled: “Linking the 12-Year Curriculum Guidelines(108 Curriculum) with General Education Competencies”

General Education Expo

Group Photo of the 9th General Education Expo

9th General Education Expo

9th General Education Expo

Public Art Installation: Imprints of My Four Seasons

9th General Education Expo – December 2024
In early December 2024, National Formosa University hosted the 9th General Education Expo, continuing the thematic framework of “SDGsology” established in the previous year. This year's theme, “Exploring SDGsology,” emphasized the integration of the United Nations Sustainable Development Goals (SDGs) into general education.
The expo featured the outcomes of 17 general education courses, showcasing interdisciplinary learning and sustainability-focused curriculum design. A highlight of the event was the unveiling of a collaborative student art installation titled “Imprints of My Four Seasons”, a public artwork that blended visual and auditory elements to reflect students' combined humanistic and technological literacy.

Documentary Video of the 9th General Education Expo

Language Education

The Language Teaching Center at National Formosa University offers a variety of foreign language courses to enhance students' global communication skills. In addition to formal instruction, the university promotes language proficiency through several initiatives:

- Implementation of the CWT third-party certified Chinese proficiency testing system
- Organization of literary awards and local language heritage programs
- Incentive schemes for obtaining foreign language certifications

◉ Implementation Status of Language Teaching Courses (2024)

Language	Number of Courses	Number of Participants
English	206	11,330
Japanese	6	299
German	2	37
Russian	4	99
Chinese	7	62


Voice of Formosa – Local Languages Master Lecture: On the Road – Lin Sheng-Xiang's Native-Language Creations

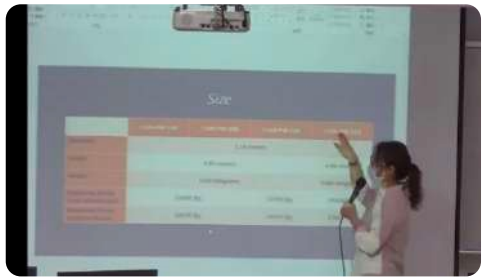

Voice of Formosa – Local Languages Master Lecture: The Condensed History of the Tsou People, Shared by Kao Hui-Chun


English Workshop – Highlights


International Students – English Conversation Class


International Exchange Gathering – Students with Hoste Tsou People, Shared by Kao Hui-Chun

18th Huwei River Literature Award – Group Photo of Awardees


English Oral Presentations by Students


English Thematic Writing – Group Discussion

◉ Implementation Status of Language Teaching–Related Activities in 2024

Activity / Program	Outcomes
CWT Third-Party Certification System	571 students were tested; 211 students reached the intermediate–high level after pre- and post-tests.
Huwei River Literature Award	Held for 18 consecutive years; in 2024, a total of 454 submissions were received
Indigenous and Local Languages Program	A compulsory course “Local Languages” was offered to first-year students, covering Taiwanese Hokkien, Hakka, and Indigenous languages. Guest lectures included Golden Melody Award–winning creator Lin Sheng-Xiang (Hakka music) and Indigenous singer Kao Hui-Jun (Tsou oral traditions).
Foreign Language Learning Environment – Foreign Language Learning Zone	52 courses were offered in English and other languages (Italian, Russian, Japanese, Spanish, French), with 1,585 student participations. 8 foreign MA/PhD students were hired to provide academic writing consultation; assisted with editing 74 thesis abstracts/introductions
Professional Vocabulary Certification (PVQC)	2 certification exams were held; 57 students passed and received certification.
International Exchange Gatherings	Each event paired 4 local students with 1 international host student, using English for casual or themed exchanges. A total of 137 sessions were held, with 518 participations.
Bilingual Teaching Mentor System	Strengthened bilingual teaching capacity; implemented in courses such as Python programming, with 120 students participating.
Foundation for English Learning – Bilingual Courses	84 bilingual courses were offered, with a total of 1,860 enrollments.
Enhancing Teachers' EMI Capacity	Online EMI professional development (Cambridge, Oxford, Studio Classroom); 75 teachers obtained certificates.
English Presentation for Capstone Projects	45 teams from 5 departments applied for support (up to NT$50,000 each) to encourage English presentations.
English Skills Training Workshops	Summer interdisciplinary courses with 4 invited lecturers; 20 students participated.
English Enhancement Courses for Student Athletes	70 sessions held for sports team members, with a total of 360 participations.

4-3 Research and Scholarship

SDGs 4、9

SDGs Sub-Targets 4.4、9.b

Since its establishment, our university has identified mechatronics as its core development focus and has long been dedicated to cultivating technical talents for the nation. In terms of administrative organization, the Office of Research and Development (R&D) and the Office of Industry–Academia Collaboration and Service (IACS) work in close coordination. The R&D Office functions as an administrative unit, responsible for academic research, policy formulation, and administrative execution, while the IACS Office serves as a business-oriented unit, linking the university's research capabilities with regional industries, academia, and research institutions, actively promoting services, and securing external resources.

To address the challenges of industrial transformation, the Intelligent Machinery and Smart Manufacturing Research Center was formally established as a first-tier unit. Through collaboration between the R&D Office, IACS Office, and the Research Center, the university aims to build strong research capacity to jointly promote academic research, industry–academia collaboration, technology transfer, and entrepreneurship incubation.

In pursuit of the vision of becoming internationally renowned in key research areas and a driver of regional industrial advancement, the following goals and strategies have been formulated:

1	Enhance International Research Performance and Exchange in Key Areas	1.Define key research domains to highlight the university's expertise. 2.Strengthen faculty research capacity and encourage international publications. 3.Promote diverse international collaborations and sister-university exchanges.
2	Actively Promote Industry–Academia and Research Projects Achieve an annual 10% growth in project funding	1.Strengthen distinctive R&D fields and industry–academia cooperation models. 2.Consolidate and integrate research teams. 3.Recruit outstanding talents. 4.Secure Ministry of Education (MOE) projects to enhance teaching and research facilities. 5.Expand collaboration and networking channels.
3	Effectively Manage R&D Capacity and Increase Regional Industry Collaboration	1.Integrate and coordinate the functions of R&D, incubation, and research units. 2.Establish a dedicated office for managing research outcomes. 3.Develop intellectual property (IP) management systems and expand related resources. 4.Enhance the outreach performance of the Innovation Incubation Center. 5.Actively participate in the planning of the Central Taiwan Science Park. 6.Improve students' professional competencies and talent cultivation for employment.
4	Promote International Exchange for Faculty and Students	1.Strengthen international student recruitment and establish a regional hub for intercultural exchange. 2.Build institutional mechanisms to expand participation in international exchange and cooperation.

Faculty Research Outcomes Aligned with the SDGs

The university encourages faculty to integrate their academic research with the United Nations Sustainable Development Goals (SDGs), focusing on various sustainability issues. SDG attributes have been incorporated into the academic profiling of faculty to better highlight contributions in journal publications, conference papers, and scholarly books.

◉ 2024 Faculty Publications Aligned with the SDGs

SDGs Goal	Journal Articles	Conference Papers	Books / Book Chapters & Other Publications	Total
Total Publications	212	373	26	611
No Poverty	7	7	0	14
Zero Hunger	4	3	0	7
Good Health and Well-Being	35	78	1	114
Quality Education	87	186	14	287
Gender Equality	2	5	1	8
Clean Water and Sanitation	2	6	0	8
Affordable and Clean Energy	28	37	0	65
Decent Work and Economic Growth	37	53	3	93
Industry, Innovation and Infrastructure	88	159	2	249
Reduced Inequalities	1	6	4	11
Sustainable Cities and Communities	23	36	6	65
Responsible Consumption and Production	20	12	0	32
Climate Action	7	7	0	14
Life Below Water	1	4	0	5
Land life	2	2	0	4
Peace, Justice and Strong Institutions	0	3	1	4
Partnerships for the Goals	10	8	0	18
Grand Total	354	612	32	998

Note: Each individual journal article, conference paper, or book (including book chapters) and other publications may correspond to up to three SDGs.

◉ Student Graduation Theses

In Academic Year 2023 (112th Academic Year), a total of 441 graduation theses were completed across the university's four colleges.

Academic Year	Master's and Doctoral Theses by College								University Total	
	College of Engineering		College of Liberal Arts and Sciences		College of Electrical Engineering and Computer Science		College of Management		Total	Growth Rate (%)
	Number	Growth Rate (%)	Number	Growth Rate (%)	Number	Growth Rate (%)	Number	Growth Rate (%)		
110	136	-14.4	34	-10.5	94	-29.3	78	-7.1	342	-17.3
111	188	38.2	43	26.4	160	70.2	73	-6.4	464	35.6
112	172	-8.5	40	-6.9	138	-13.7	91	24.6	441	-4.9

Note: Growth Rate = (Number in Current Academic Year − Number in Previous Academic Year) ÷ Number in Previous Academic Year × 100%

Intelligent Machinery and Smart Manufacturing Research Center

Geographically, our university is adjacent to several key hubs for precision machinery development planned by the government, including the Central Taiwan Innovation Park, Taichung Precision Machinery Technology Innovation Park, Chiayi Dapumei Precision Machinery Park, Changhua Coastal Industrial Park, and the Taichung, Houli, and Huwei campuses of the Central Taiwan Science Park. As such, the university has long focused on integrating research capacity across departments to engage in tool machine and precision machinery R&D as well as industry collaboration.
Established under the MOE Higher Education Sprout Project: Featured Research Center Program, the Intelligent Machinery and Smart Manufacturing Research Center was elevated as a first-tier administrative unit. Since its inception, the Center has consolidated and enhanced the university's distinctive strengths in precision machinery technology, gradually transforming into an internationally recognized research hub.

In response to global manufacturing trends, the Center has undertaken numerous government-led smart manufacturing projects. Its strategies include strengthening key technologies in advanced manufacturing systems, building an industry–academia–research alliance platform, establishing domestic demonstration production lines, creating training bases, and engaging retired senior executives from renowned global corporations as advisors to support Taiwanese machine tool manufacturers in developing advanced multi-functional machines. From 2018 to 2024, the Center has assisted, transferred technology to, or conducted commissioned research with more than 75 companies, in addition to collaborations with research institutes such as ITRI's Smart Machinery Center, Precision Machinery Research & Development Center, and the Institute for Information Industry.
On the international level, partners include universities and corporations from Japan (Tokyo University of Agriculture and Technology, Hiroshima University, Sophia University, NK Works, Makino, Mazak, Okuma, DMG Mori, Mitsubishi), Germany (Fraunhofer IPT/RWTH Aachen, Lübeck University, Siemens), the UK (University of Manchester, Brunel University, University of Huddersfield), and the USA (University of Texas at San Antonio, Inductive Automation). These achievements earned the university the 2021 National Industrial Innovation Award – Outstanding Academic and Research Institution.

◉ 2024 Key Achievements

1	57 projects, valued at approx. NT$703.7 million. 15 technology transfer cases, valued at approx. NT$74.8 million.
2	20 invention patents and 1 utility patent granted domestically and internationally.
3	20 international journal papers and 39 international conference papers.
4	Assisted 8 companies in securing MOE and MOEA grants totaling approx. NT$2.297 billion. Conducted/participated in 3 STEM empowerment activities for primary and secondary schools, involving 204 participants.
5	Five major technologies/products were developed: ・Laser R-Test (LRT/α1): Multi-axis machine tool calibration technology ・Smart Machine Engine (SME): Intelligent machinery management platform ・i-Node: IoT technology for machine tool components ・MTTS/mLogging: Digitalized machine tool production traceability system ・Guardian: Collision prevention system Benefited 75+ companies and organizations through technology transfer and application.
6	Two spin-off companies established, both remain in operation.

Gold Medal at the U.S. International Innovation Exhibition and Special Award from Canada

1st Place, AsiaSilicon Valley 3.0 Smart IoT Innovation Category, University and College Information Application Service Innovation Competition

Gold Award, Macronix Golden Silicon Awards – Semiconductor Design and Application Contest

High-Speed Rail Campus – Demonstration Production Line 2

7	500+ participants trained through diverse measures, including senior expert recruitment, industry–academia joint platforms, industrial colleges, student and corporate training courses, international internships, and research achievement awards.
8	Three existing demonstration lines maintained and upgraded, with a new facility at the High-Speed Rail Campus. Enhanced two lines to focus on motor spindle pre- and post-processing, creating links with the UAV industry.
9	Guided Chengdai Tech and Jingxi Tech to complete ISO 14955-3 machine tool energy consumption testing. Developed AI-based energy consumption prediction models for machining processes.
10	Gold Medal & Special Award at the U.S. International Innovation Exhibition. First Place in the Asia–Silicon Valley 3.0 Smart IoT Innovation Contest. Gold Award at Macronix Golden Silicon Awards (Semiconductor Design and Application).
11	Certified by the Industrial Development Administration (MOEA) as an AU-3 Automation Service Organization and SD-6 Sustainability Development Service Organization, capable of offering services in automation machinery design, engineering network-based monitoring, online automatic inspection, and low-carbon metal processing. In 2024, collaborated with 75+ companies, generating 15 commercialized/high-value technologies, products, or business models.
12	Focused on ESG and green manufacturing trends. In 2024, 14 carbon footprint auditing projects were conducted, with 10 projects ongoing as of March 2025.

Technical R&D Center – Aviation Maintenance Training Center

In line with national policy and industry demand for aviation maintenance professionals and licensing programs, the university applied to the Civil Aeronautics Administration (CAA), Ministry of Transportation and Communications, to establish the Aviation Maintenance Training Center of National Formosa University (NFU). The Center fully complies with the CAA's "05-02A Regulations on the Establishment of Civil Aviation Personnel Training Institutions."
It is also the first institution in Taiwan to pass the new CAA regulatory standards and to be officially approved as a Category B1 Basic Training Organization for aviation maintenance certification. At the same time, the university has established the Bachelor's Degree Program in Aviation Maintenance, integrating academic training with licensing requirements.

The program is designed around a "Degree + License" model, ensuring that students from related departments not only obtain a bachelor's degree but also acquire the Aircraft Maintenance Engineer B1.1 License.
Leveraging the strengths of the Department of Aeronautical Engineering within the College of Engineering, NFU aims to develop the Asia-Pacific Aviation Maintenance Training Center. The university is committed to creating diverse training courses, actively pursuing international certification, and aligning higher education with global aviation standards. The Center aspires to serve as a platform for civil aviation personnel, technology, and institutional exchange, and to become a key training base for international aircraft maintenance professionals, particularly for the Chinese-speaking world and Southeast Asia.

On June 28, 2024, the Center held the 5th Graduation Ceremony for the CAT B1.1 Aircraft Maintenance Engineer Certification Program, with industry experts from Evergreen Aviation Technologies, STARLUX Airlines, China Airlines, and Daily Air invited as distinguished witnesses.

Key Highlights

- The only national university in Taiwan with a focus on practical aircraft engineering.
- The first national university approved by the CAA as a Category B1 Basic Training Organization.
- Offers a Bachelor's Degree Program in Aviation Maintenance, with a student certification pass rate of over 90% and a 100% employment rate.

Number of Aviation Maintenance Training Certifications and Related Information

Academic	Number of Trainees in Aviation Maintenance Training	Aviation Maintenance Certification Statistics
110	24	22
111	26	23
112	25	Currently Enrolled

Note: Based on the student's year of admission, graduation is expected after two years.

Teaching Courses of the Aviation Maintenance Training Center






Technical R&D Center – Agricultural Research and Extension Center

Located in an agricultural production region, our university established the Agricultural Research and Extension Center in accordance with the Ministry of Agriculture's Regulations on Agricultural Research, Education, and Extension Cooperation. The Center aims to integrate industry, government, academia, and research resources as a driving force for agricultural human resource development, generate industrial spillover effects, and build competitive advantages in localized agriculture. It is dedicated to addressing issues related to farm management and rural development, while also engaging in collaborations with agricultural research institutes and universities, developing extension materials, and organizing training programs and demonstration activities.

1	Huwei River Community University : Since 2001, the Center has operated the Huwei River Community University under the principles of empowering rural communities, preserving and creating local culture, and fostering social innovation. Through community development planning and diverse courses, the program cultivates civic literacy, strengthens public engagement capabilities, and fosters local identity and community revitalization. Each semester, approximately 75 courses are offered, with more than 1,400 course enrollments.
2	Farmer's University:Established in 2010, the Farmer's University has trained nearly 2,000 agricultural managers over 14 years. The program encourages lifelong learning and experience sharing among farmers, introducing knowledge of smart, technological, and precision farming, along with sustainable environmental practices. It enhances farmers' competitiveness in production and marketing while promoting environmentally friendly practices. This initiative led to the establishment of the Taiwan Agricultural Managers Association and the Yunlin County Precision Agriculture Cooperative, fostering a new wave of farmer empowerment.
3	Agricultural Product Commercialization Guidance : The Center assists farmers in upgrading their products through the six-level industrialization model, integrating professional technology with market orientation. Successful cases include transforming black beans and peanuts into organic black bean soymilk and seasoned “Black King Kong” peanuts. The latter product was successfully launched in FamilyMart convenience stores, expanding market channels and demonstrating effective farm-to-market linkages. This not only increased product value and competitiveness but also enhanced local agricultural branding and economic development.
4	Other Industry–Academia Collaboration Initiatives : Given the importance of organic agriculture and the volatility of global grain prices, domestic grain production has become increasingly vital. The Center has supported the development of a comprehensive value chain for organic grains, ranging from seed production and mass cultivation techniques to cold-chain quality management and soybean processing technologies. These efforts have enabled the establishment of an integrated supply chain for organic grains in Taiwan. Additionally, the Center has guided farmers in forming cooperatives to jointly manage the Magong Organic Group Cultivation Area, contributing to the advancement of organic agriculture in Taiwan.
5	Project Implementation:The Center has undertaken multiple projects, including: ·Independent initiatives such as the Farmer's University. ·Local government programs such as the Huwei River Community University. ·MOE projects including the University Social Responsibility (USR) Program and the Industry–Academia Collaboration and Talent Cultivation Platform. ·Promotion of Participatory Guarantee Systems (PGS), organic agriculture, and cooperative farming models. ·Implementation of the Yunlin Granary Project – Magong Organic Group Cultivation Area. ·Guidance for agricultural enterprises in transformation and other industry–academia collaboration projects.

Implementation of “Yunlin County Farmer's University”	1. Established in 2010, the Farmer's University has cultivated a total of 2,059 agricultural managers to date, with 307 students enrolled in 2024. 2.Graduates have independently organized into agricultural groups, including: ·Yunlin County Precision Agriculture Production Cooperative ·Yunlin County Agricultural Managers Association ·Taiwan Agricultural Managers Association
Implementation of “Yunlin County Huwei River Community University”	Planned as a rural-based community university offering agricultural courses: 1. In 2024, the program delivered 324 hours of agricultural-related courses. In addition to agricultural technology training, it also prepared learners interested in agriculture, horticulture, and landscaping to obtain professional certifications, including: ·Organic and Natural Farming Field Practice ·Landscape and Ecological Farm Planning (Theory) ·Landscape and Ecological Farm Planning (Practical) 2. Collaborated with the Fifth River Management Office, Water Resources Agency, to jointly promote the Huwei Tide Waterfront Environmental Engineering Project.
Promotion of the “Granary Project – Establishment of the Magong Organic Group Cultivation Area”	1. Formed a large-scale agricultural machinery operation team, with students trained in equipment operation. 2.Achieved organic certification and transitional certification for 197 hectares of farmland. 3.Cultivated 2,271 trees and 33,832 shrubs. 4.Recognized with the following awards in 2024:Global Views CSR & University Social Responsibility Award – First Prize, Ecology & Sustainability Category 5.City Nature Challenge 2024 – Ecological Community Award (Outstanding Performance) 6. PwC Taiwan Sustainability Impact Awards 2024 – Social Category (Finalist)

Public Engagement Week – Agricultural Biology and Technology Sharing (Huwei River Community University, Yunlin County)

Talent Cultivation Platform – Intercollegiate Agricultural Working Circle

Farmer's University Homecoming Combined with Sugar Railway Activities

Fenggang Village Sustainability Week – Phoebe zhennan Tree Restoration Activity

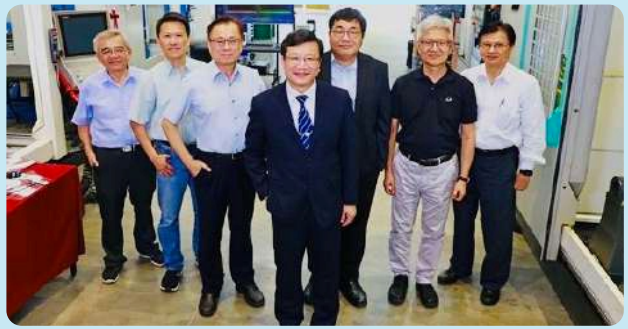
R&D Team – Electric and Autonomous Shuttle Bus

On November 20, 2023, during the university's anniversary celebration, National Formosa University (NFU) unveiled its autonomous driving subsystem key technologies and showcased, for the first time, an electric bus jointly developed by its interdisciplinary R&D team, demonstrating NFU's academic strength and innovative vitality.

The autonomous driving subsystem integrates cross-disciplinary expertise from the university's mechatronics teams, covering six major domains: positioning and navigation, sensor fusion, image recognition, decision-making and control, human–machine interface, and vehicle-to-everything (V2X) integration. The research aims to achieve practical applications in road operations and station shuttle services.
From a materials perspective, NFU applied aerospace advanced composite materials to bus body structure development, reducing vehicle weight while enhancing battery protection. This innovation achieved a 65% weight reduction in the skeleton and skin of large electric bus bodies, significantly increasing driving range and safety. Faculty and students worked together on composite material R&D and industry–academia collaborations, integrating the autonomous driving subsystem into the electric bus. Their collective efforts focus on helping the EV industry lower costs while leveraging intelligent machinery and smart manufacturing to create scalable, mass-production-ready technologies.

At NFU's High-Speed Rail Campus, advanced research and teaching facilities are being developed, including the Intelligent Machinery and Smart Manufacturing Research Center and a cutting and machining laboratory hall, providing top-tier, production-line-like training environments. This innovative model of talent cultivation equips students with practical, industry-ready competencies, enabling them to significantly contribute to enterprise performance and industrial growth. Since December 2024, NFU's autonomous driving team has obtained road testing permits around the Yunlin High-Speed Rail Station, accumulating more than 30 kilometers of trial operations. In compliance with regulatory requirements, the team continues to establish the technological foundation necessary for full autonomous driving deployment.

Test Ride of NFU's Electric Autonomous Shuttle Bus



President Chang Hsin-Liang Leads Interdisciplinary Team to Cultivate EV Talent

NFU EV Mechatronics Talent Cultivation Base – On-Site Practice and Certification Venue for Students

4-4 Industry–Academia Collaboration

SDGs 2、4、7、8、9、15、17

SDGs Sub-Targets 2.3、2.4、4.4、7.a、8.3、9.5、9.b、15.3、17.17

NFU actively promotes a “learning–application integration” model to establish a highly efficient framework for industry–academia collaboration. The university excels in cultivating industry-relevant technical skills and professional competencies. Over the past five years, NFU has averaged 100 approved research projects annually from the National Science and Technology Council (NSTC), with total annual funding averaging NT$105 million. More than 80% of faculty members possess practical industry experience, and industry–academia collaboration projects have steadily increased—reaching 814 projects in the past three years, with accumulated funding of NT$410 million. In 2023–2024, NFU secured 48 NSTC projects and 70 industry–academia projects funded by the MOE and government agencies. In recognition of these outstanding achievements, NFU received the “Excellence in Industry–Academia Collaboration Award” from the Chinese Institute of Engineers in 2024.
To further strengthen cooperation, NFU developed the Digital Industry–Academia Collaboration (DIAC) System, which provides effective matching between industry needs and faculty/student expertise. Through this platform, collaboration opportunities have expanded, supported by mechanisms such as the 365 Coaching Program and interdisciplinary technical advisory teams, enhancing industrial engagement and internship opportunities. This ecosystem fosters R&D–practice integration, accelerates technology transfer, and shortens commercialization timelines.
NFU emphasizes patent quality and strategic planning, improving the competitiveness and applicability of intellectual property. In 2024, NFU completed 31 technology transfer cases, including initiatives introducing AI technologies into the machine tool industry. To deepen industry links, NFU organized 16 on-site service sessions in Taichung and Douliu Industrial Parks, engaging with 412 companies to identify technical needs and application contexts. The university also leveraged its Research Commercialization Platform, guiding two teams through technical assessment, market analysis, business model development, and NSTC startup project applications.
NFU's Smart Innovation Program integrates SDGs and ESG concepts into its curriculum, training students to propose innovative solutions with real-world value. Achievements include:Competitions & Awards:
·2024 E-System Creative Application Contest – Award of Merit.
·NT$300,000 subsidy from the Taipei Digital Enterprise Development Center for digital transformation projects.
·2024 Tokyo International Design & Invention Exhibition – Gold Medal for Mini/Micro LED display project.
·2024 National IC Design Competition (MOE) – Outstanding awards across multiple categories (Excellence, Distinction, Merit, Completion).
·2024 Smart Chip System Application Competition – Silver and Merit Awards for projects such as “Automated Animal Conservation Monitoring Platform” and “EcoSmart Energy & Security Management System.”
·2024 Smart Computing Innovation Contest – Bronze Award (AI Cancer Cell Evaluation System).
·2024 Poland International Invention Exhibition – Gold Medal (AI Microfluidic Chip for Rapid Deployment).
·2024 Macronix Golden Silicon Awards – Gold and Bronze Awards in Semiconductor Applications.
·2024 National Smart Manufacturing Application Contest – Silver Award (AI Innovation Category).
·2024 National Programming Contest for Universities and Colleges – 1 Gold, 2 Silver, 2 Bronze.
NFU also partners with leading corporations to establish joint teaching–research centers, including:
·Thunder Tiger Technologies – UAV
·Hiwin Technologies & Siemens – Smart Manufacturing
·Shih Hsiang Automotive – EV & Auto Components
·Delta Electronics & Beckhoff Automation – Smart Mechatronics
These collaborations channel industry resources into co-training future talent. NFU is also investing heavily in facilities at the High-Speed Rail Campus, with an allocated budget of NT$990 million. By 2025, construction will include the International Industry–Academia Collaboration Building and two experimental factory halls, complementing facilities already completed in 2023 (Smart Machinery and Cutting/Processing Labs).NFU students consistently excel in competitions, highlighting their strengths in practical applications and innovation. These outcomes have further reinforced NFU's reputation as a top choice for employers. In the 2023 Cheers Magazine “Most Favored Graduates by Enterprises” survey, NFU ranked among the Top 5 national universities of technology. In the 2024 survey, NFU maintained its position at 5th place nationwide among public universities of technology, underscoring its excellence in technical education and its success in bridging academic learning with industry practice.

Industry–Academia Collaboration Building at the High-Speed Rail Campus

◉ Statistics of Industry–Academia Collaboration Projects

Source		NSTC Industry–Academia Collaboration Projects		MOE Industry–Academia Collaboration Projects		Corporate Industry–Academia Collaboration Projects	
		Number of Cases	Funding Amount (10,000 NTD)	Number of Cases	Funding Amount (10,000 NTD)	Number of Cases	Funding Amount (10,000 NTD)
Year	2021	21	2,055	1	180	183	7,733
	2022	20	1,297	1	200	246	12,355
	2023	17	965	1	360	248	9,933
	2024	14	1,282	2	220	245	11,243

◉ Statistics of Enterprises Cultivated

Year	Number of Entrepreneurs Cultivated	Number of Startup Entrepreneurs Cultivated
2021	45	24
2022	56	32
2023	53	30
2024	43	20

◉ Number of Granted Patents

Year	Number of Patents
2021	53
2022	63
2023	47
2024	43

◉ Number/amount of technology transfer and authorization

Source		Technology Transfer		Licensing	
		Number of Cases	Amount	Number of Cases	Amount
Year	2021	24	10,861,000	1	500,000
	2022	4	9,301,040	29	9,892,209
	2023	32	13,847,250	0	0
	2024	31	17,829,500	0	0

UAV (Unmanned Aerial Vehicle) R&D and Applications

National Formosa University (NFU) is the only national university of technology in Taiwan with a Department of Aeronautical Engineering and a Graduate Institute of Aeronautical and Electronic Technology. The university also operates an Autonomous Flight Laboratory and a CAA-certified Aviation Maintenance Training Center. With over a decade of dedicated UAV research and development, NFU has received funding support from the MOE's Regional Talent and Technology Cultivation Base Project. Together with the Chiayi County Asia UAV AI Innovation Application R&D Center (Asia Innovation Center) and the ongoing construction of the International Aviation Training Building at the High-Speed Rail Campus, NFU continues to transform its long-accumulated advantages in UAV innovation into student expertise and workplace competitiveness.

As the UAV industry rapidly expands and diversifies, NFU focuses on innovative UAV technologies, establishing core strengths in design and manufacturing, power conversion systems, intelligent control, and maintenance. Through collaboration with the Asia UAV AI Innovation Application R&D Center, NFU has built an international network and developed four pilot-scale practical training environments:

- Smart Manufacturing
- Aerospace Maintenance
- Flight Simulation and Certification Testing
- Smart Agriculture

These resources align with Taiwan's national priorities in emerging industries and enable NFU to cultivate students with both forward-looking research skills and practical, industry-ready innovation capabilities.

2024 UAV Development Highlights of NFU

Highlight	Description
Establishment of NFU UAV Talent Training Base at the Industrial Park	The unveiling ceremony marked the opening of the Advanced UAV Equipment Laboratory, built with an investment of NT$50 million. The laboratory features a complete environment integrating UAV design, manufacturing, testing, and verification, and houses Taiwan's largest UAV wind tunnel facility. Applications extend to national defense, territorial inspection, disaster relief, logistics, and smart mobility.
Launch of the Thunder Tiger–NFU Joint R&D Center	The Center introduced a new transformable multi-rotor UAV, combining the vertical takeoff and landing functions of multi-rotor drones with the endurance of fixed-wing aircraft. This innovation extends flight duration by 30%, simplifies assembly and operation, and aligns with the latest UAV development trends.
Signing of the Taiwan White Dolphin UAV and Campus Collaboration Project (Sustainability Action MOU)	NFU engaged in sustainable technology development for marine conservation. In collaboration with the Matsu Fish Conservation Alliance, ecological data on white dolphins was provided, enabling NFU to develop a UAV-based tracking system for species identification, monitoring, and habitat observation, while cultivating specialized UAV tracking talent.


UAV Talent Cultivation


NFU UAV Talent Training Base


Thunder Tiger–National Formosa University Joint R&D Center


Taiwan White Dolphin UAV–Campus Collaborative Research Project

Asia UAV AI Innovation Application R&D Center | Image Source: Asia Innovation Center Website

Asia UAV AI Innovation Application R&D Center

Since 2021, National Formosa University (NFU) has been commissioned by the Chiayi County Government to manage and operate the Asia UAV AI Innovation Application R&D Center. The Center provides in-service training and, in collaboration with NFU's Department of Aeronautical Engineering, cultivates cross-disciplinary UAV specialists. Training encompasses the design, manufacturing, integration, testing, licensing, and mission execution of fixed-wing, rotary-wing, and VTOL hybrid UAV systems.

The Center integrates aviation and electronic systems courses, equipment operation, technology development, industry–academia collaboration, and student internships and employment opportunities, thereby achieving its dual goals of talent cultivation and technological advancement.

As of 2024, the Center hosts 37 participating units, including government agencies, research institutes, academia, enterprises, and associations. These collaborations jointly provide in-service training for UAV industry professionals and support enterprises in developing UAV-related technologies and applications, further driving the growth of the UAV industry.

4-5 Awards and Honors

SDGs 3、4、8、9

SDGs Sub-Targets 9.b

Major Awards and Achievements in 2024

Award	Achievement
5th Global Views University Social Responsibility Awards	Department of Agronomy – From Sweet Sugarcane to Fragrant Soybeans: Building an Organic Ecological Village won 1st Prize in the Ecology & Sustainability Category.
APSAA – Asia-Pacific Sustainability Action Awards	APSAA – Asia-Pacific Sustainability Action Awards - Prof. Meng-Hua Lee, Dept. of Industrial Management: Industrial Sustainability and Low-Carbon Intelligent Carbon Emission Management – Gold Award - Prof. Ta-Cheng Chen, Dept. of Information Management: Energy Efficiency Governance and Promotion in Yunlin County – Silver Award - Prof. Hsin-Liang Chang, Dept. of Power Mechanical Engineering: Customized Non-Circular Sprockets for Bicycles – Bronze Award - Assoc. Prof. Chung-Yen Lin, Dept. of Aeronautical Engineering: UAVExD, Delivery Solution from the Blue Sky without Footprint – Bronze Award - Assoc. Prof. Shih-Hao Kang, Center for General Education: USR HUB Project – Acting on Cultural Regeneration for Female New Immigrants – Bronze Award TSAA – Taiwan Sustainability Action Awards - Prof. Shou-Ku Tai, Dept. of Agronomy: Co-Creating a New Agricultural Economy – Gold Award - Prof. Jung-Yuan Chou, Dept. of Mechanical Design Engineering: Smart Mushroom Industry Digital Upgrading – Bronze Award - Prof. Shih-Chang Lin, Dept. of Power Mechanical Engineering & Prof. Shou-Ku Tai, Dept. of Agronomy: Bamboo and Wood Recycling Towards Net-Zero Carbon – Bronze Award
Taiwan Sustainable University Awards2024	NFU received the Outstanding Award for Sustainable University and the Silver Award for Sustainability Report.
2024 Smart Innovation Cross-Disciplinary Competition2024	Prof. Kuo-Yi Chen, Dept. of Computer Science and Information Engineering (CSIE), and his team won 3rd Place (Foreign Object Detection in Water Towers) and an Honorable Mention (Roller Skating Posture Recognition via Pose Detection).
2024 National IC Design & Smart Chip System Application Competition2024	Dept. of Electrical Engineering teams won Excellence, Distinction, Merit, and Completion Awards; CSIE teams won Silver Award and Merit in Smart Chip System Applications.

2024 Smart Innovation Contest

2024 National Intercollegiate IC Design and Smart Chip System Application Innovation Contest


Warsaw International Invention Exhibition 2024

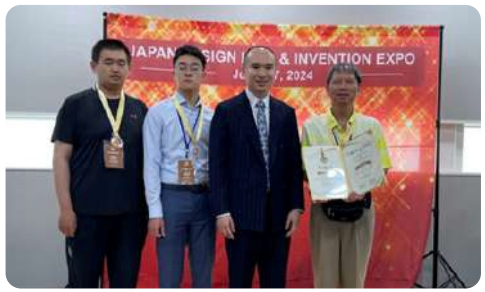
2024 Tech Innovation & Entrepreneurship

Major Awards and Achievements in 2024

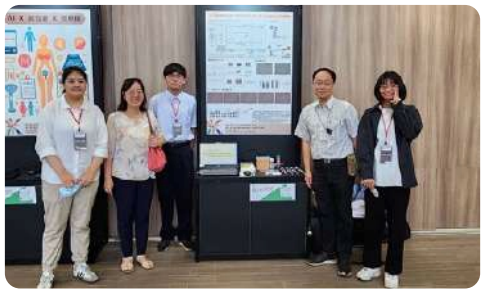
Award	Achievement
2024 Warsaw International Invention Show (Poland)2024	Cross-disciplinary team led by Profs. Yi-Ling Yeh & Ming-Shen Chien won Gold Medal with the patent Microfluidic Chip with Self-Calibration for Rapid AI-Based Identification.
2024 Innovation & Entrepreneurship Tech Challenge	CSIE team won 1st Place (Safe Sleep System) and two Enterprise Awards (Radar-Based Automated Animal Population Evaluation System).
24th Macronix Golden Silicon Awards	CSIE student teams' projects AI Smart Interactive Table Tennis Racket and Emotional Companion Smart Home Assistant won Jury Gold Award (Applications Group), Jury Bronze Award (Applications Group), and Rookie Award, taking home over NT$800,000 in prize money.
2nd Taichung Precision Machinery CNC Multi-Axis Skills Competition	NFU teams ranked within the Top 7 in both the Turn-Mill Compound Group and the Five-Axis Group.
World High School & Vocational Solar Model Car Competition	Student Yu-Ching Sun, Dept. of Vehicle Engineering, won the World Championship.
9th National University & College Programming Contest2024	NFU CSIE teams won 1 Gold, 2 Silver, and 2 Bronze Awards.
2024 Tokyo International Design & Invention Exhibition (Japan)	Dept. of Photonics Engineering developed Flexible OLED Lighting Film on Stainless Steel Foil, winning a Gold Medal.
3rd Qin Cheng & Syntec Cup Smart Robotics Competition	Team Opportunity Knocks (guided by Asst. Prof. Yun-Shuai Yu, Dr. Jun-Chieh Chan, and Prof. Chun-Ching Hsiao) won the Championship, with NT$120,000 prize money.
National Intercollegiate Athletic Games	Track & field and tennis athletes won: Men's High Jump Gold (National Record); Men's Hammer Throw 1 Gold, 1 Silver; Men's Triple Jump Gold; Tennis Men's Singles Silver; Tennis Women's Singles Bronze; Soft Tennis Women's Singles Silver; Soft Tennis Mixed Doubles Silver.
2nd Smart Computing Innovation Competition	Interdisciplinary team (CSIE + Biotechnology) won the Bronze Award in the Health Computing Category for AI-Based Cancer Cell Killing Efficiency Evaluation and Prediction.
18th Huwei River Literature Award	- Student Prose Group: Wei-Lun Hsiao (Dept. of Electrical Engineering) won 1st Prize (Heading South). - Student Illustration & Prose Group: Kuan-Hung Lin (Dept. of Power Mechanical Engineering) won 1st Prize (Mosquito Coil)
29th National Information Application Service Innovation Contest	NFU teams won 6 awards: - Robot for Autonomous Dish Arrangement and Clearing – 1st Place - AIoT Visual Recognition TNVR Management Platform – 2nd Place - AI Interactive Virtual Character Design for Smart Living – 3rd Place - FCP-UNet Fingerprint Recognition Module – 2nd Place - Dual AI Adaptive Table Tennis Training System with Feedback & Ball Serving Functions – 2nd Place - AI Smart Volleyball Coach for Real-Time Posture Detection & Training – Honorable Mention

24th Golden Silicon Awards

9th National Programming Contest for Universities and Colleges



Tokyo International Design & Invention Expo 2024



2nd Smart Computing Innovation Applications Contest

The university encourages and arranges students to participate in both domestic and international certification examinations and competitions. Students who achieve top-three placements in international or national competitions, or who obtain Class A or Class B technician licenses, as well as other certifications recognized as equivalent to Class A or B licenses, are eligible to apply for technical skill awards and receive monetary prizes.

◉ Student Skill Awards – Certification Competitions (Domestic & International), Cases/Participants

Year	Student Skill Awards		Certification Competitions (Domestic & International)				
	Number of Cases	Number of Participants	Gold	Silver	Bronze	Special	Total
2022	138	181	18	14	11	74	117
2023	191	270	27	39	33	19	118
2024	235	273	28	21	29	110	188

Outstanding Teaching and Research Faculty

◉ Distinguished and Outstanding Teachers & Outstanding Research Faculty

Year	Number of Distinguished Teachers	Number of Outstanding Teachers	Number of Outstanding Research Faculty
2022	2	5	3
2023	2	3	2
2024	4	5	5

To recognize and honor faculty members for their contributions to teaching and their excellence in improving pedagogical methods, the university annually selects Outstanding Teachers and Distinguished Teachers for awards. Full-time faculty members who have taught for at least three years and have successfully passed faculty evaluations within the past three years are eligible for nomination. Each year, candidates are recommended and selected as Outstanding Teachers, from which a smaller group is further chosen as Distinguished Teachers.

In addition, to reward faculty members with exceptional research achievements and to encourage their continued engagement in academic research and industry–academia collaboration, the university has established the Outstanding Research Faculty Award Program. Award recipients receive a monthly research incentive grant to further enhance NFU's research environment and innovation capacity.

4-6 Resource Sharing

SDGs 4

SDGs Sub-Targets

Exhibitions and Performances

The Art Center at NFU carries five core functions: exhibition, education, collection, research, and recreation. Beyond its regular exhibition and performance activities, the Center emphasizes education and outreach by curating themed exhibitions and organizing art education events to increase student and community exposure to art and opportunities for public participation, thereby realizing the vision of “embedding art in the campus.”
By integrating cross-disciplinary exhibition projects, professional art expertise, administrative resources, and the university's strengths in technology, the Center develops diverse artistic forms and extends artistic activities from the campus into Yunlin County and even to other cultural venues across Taiwan. It also contributes to art education in high schools and vocational schools, as well as services for rural communities, fulfilling NFU's social responsibility.

Sharing campus resources through museum visit programs, fostering cultural equity.

◉ On-campus Art Exhibitions and University History Exhibitions

Academic Year	Completed exhibition and performance activities	Number of visitors
110	9	5,963
111	11	6,432
112	9	6,356

◉ Vocational Exploration and Experiential Activities in Collaboration with National Social Education Institutions

Academic Year	Organize course activities	Total number of participants in the course	Group visits	Total number of visitors to the exhibition
110	92	3,432	173	97,369
111	93	10,346	289	216,799
112	110	2,678	275	118,843

◉ Quanta Culture & Education Foundation “Traveling Exhibitions of Art” Project

Academic Year	Completed the touring exhibition	Organize exhibition and training camp sessions	Number of participants in the workshop	Total number of visitors to the exhibition
110	13	20	562	7,840
111	13	12	656	7,471
112	15	9	835	9,465

Revitalizing campus spaces and transforming them into vibrant venues for student exhibitions and performances.

Revitalizing campus spaces and transforming them into vibrant venues for student exhibitions and performances.

Sharing campus resources by offering vocational education extension courses to realize educational equity.

Quanta Foundation Art Touring Exhibition – Yuanchang & Xinsheng Elementary School Guided Workshop

Career Exploration and Experiential Learning in TVE – Rural School Outreach and Exhibition Tours

Anniversary and Christmas Concert on Campus

Anniversary and Christmas Concert on Campus

Art Exhibition Visit for Faculty, Staff, and Students

Art Exhibition Visit for Faculty, Staff, and Students

Organizing Three Art Exhibitions per Semester

Art Exhibition Opening & Artist Tour

Library Services

To maximize the effectiveness of its collections and achieve resource sharing, the NFU Library not only provides borrowing services to external users but also actively participates in the National Document Delivery Service (NDDS) and the Changhua–Yunlin–Chiayi Regional University and College Library Consortium. In addition, the Library has signed interlibrary loan agreements with National Chung Hsing University, National Taiwan University of Arts, Huwei Senior High School, and Huwei Agricultural & Industrial Vocational Senior High School, thereby sharing library resources and spaces while fulfilling the university's role in local social responsibility.

The Library also provides free interlibrary cooperation services in the fields of physics, chemistry, and mathematics. Through various research promotion projects funded by the National Science and Technology Council (NSTC), the Library supports academic inquiry and facilitates the reciprocal sharing of knowledge and information.

◉ Library Visitor Statistics

Year	Interlibrary Visitors	External Library Visitor Statistics	Total
2022	471	11,955	263,285
2023	346	20,111	297,741
2024	54	17,453	322,794

Student Sustainability Projects Exhibition at the Library

Library Christmas Sustainable Resource Exchange Event

The library's first and second floors provide bright and comfortable reading spaces for faculty, staff, and students.

University Anniversary Library Week: Learn & Use the Library Activities

4-7 International Exchange

SDGs 4、17

SDGs Sub-Targets 4.b、17.1、17.9、17.16

NFU actively expands its global academic collaborations in line with the goal of internationalizing Taiwan's talent development and the national New Southbound Policy. The university promotes international faculty and student exchanges, academic cooperation, and research collaboration to strengthen global connections.

Currently, NFU's network of international partnerships includes 80 sister universities worldwide. Highlights include:

- Signing a Memorandum of Understanding (MoU) between the TAItech Alliance (an alliance of six Taiwanese universities including NFU) and the HAWtech Alliance of Universities of Applied Sciences in Germany.
- Partnerships with several top universities in India, including the Indian Institute of Technology Delhi (IITD), Indian Institute of Science (IISc), Indian Institute of Technology Madras (IITM), Chandigarh University, and SRM Institute of Science and Technology (SRMIST).
- Collaborations with universities in Vietnam, such as Ho Chi Minh City University of Technology and Hanoi University of Science and Technology.
- Additional partnerships with University of Kent (UK), Çukurova University (Turkey), and Gebze Technical University (Turkey).

In total, NFU has established sister-school agreements with institutions across the United States, United Kingdom, Germany, the Netherlands, Czech Republic, Canada, Russia, Lithuania, Hungary, Cuba, Vietnam, India, Thailand, Indonesia, and other countries.

To further strengthen global academic engagement, NFU regularly participates in major international education conferences, including the Asia-Pacific Association for International Education (APAIE), the NAFSA Annual Conference & Expo (USA), and the European Association for International Education (EAIE).

◉ Statistics of International Students

Academic Year	Number of International Students	Overseas Chinese Students	Mainland Chinese Students	Hong Kong and Macao Students
111	93	26	3	21
112	79	25	0	15
113	91	20	0	9

Note: The statistics are based on the first semester of the respective academic year.

Highlights of International Exchange Activities in 2024

1	Since 2017, NFU has implemented the Taiwan Experience Education Program (TEEP) to attract outstanding international students for short-term academic exchanges, with the long-term goal of recruiting them into NFU's graduate programs. In 2023, NFU integrated TEEP with the university's internship curriculum to create its own Formosa Talent Internship Program, successfully recruiting 34 students from partner universities in India, Indonesia, and Vietnam. The program strengthens NFU's international atmosphere and fosters a collaborative learning environment.
2	Beginning in 2022, NFU combined resources from the TEEP program and the Indonesian TVET International Mobility Scholarship, successfully bringing 12 top students from several Indonesian universities to NFU in 2024, contributing to Taiwan's New Southbound Policy for talent cultivation.
3	Together with NFU's Canadian partner, the British Columbia Institute of Technology (BCIT), NFU recommended 26 students to participate in summer internships in Canada.
4	NFU, as part of the TAItech Alliance (six leading universities of technology in Taiwan), has collaborated with Germany's HAWtech Alliance since 2017. This partnership promotes bilateral Taiwan–Germany higher education exchange and high-quality talent cultivation.
5	From April 14–17, 2024, NFU hosted Prof. Ebocha, Director of R&D at Manipur University, India, to discuss academic exchange, sign an MoU, and explore opportunities in student exchange, faculty joint research, and cultural programs, further strengthening bilateral cooperation.
6	NFU organized cultural exchange activities with international student ambassadors, including Vietnamese Coffee Night, Eid al-Fitr Celebration, Diwali Festival of Lights, and International Food Festival. These events enriched intercultural understanding among Taiwanese faculty, staff, and students while easing homesickness for international students.

Diwali Celebration – November 12, 2024

Foreign English TA Program – Pakistani Student Teaching in Class (March 5, 2024)

InnoVEX & COMPUTEX Field Trip – June 7, 2024

2024 International Mobility Learning Program – Group Photo at the Richmond Aviation Institute Campus Hangar Graduation Ceremony

2024 International Mobility Learning Program – Demonstration of Lathe and Machine Tool Operations in the Aviation Maintenance Training Course.

NFU Vice President for International Affairs, Prof. Li-Wei Chen, presented graduation certificates to the 2023 recipients of the "Indonesian International Mobility Scholarship Program."

Prof. Ebocha, Director of R&D at Manipur University, India, visited NFU to discuss academic exchange and cooperation, including the signing of a Letter of Intent, with the aim of strengthening bilateral collaboration.

In partnership with Germany's HAWtech Alliance, NFU aims to promote bilateral higher education exchange between Taiwan and Germany and to cultivate high-quality talent.

At NFU's 44th Anniversary Celebration, the Indonesian Economic and Trade Office in Taipei presented a gift to express gratitude for the university's dedication to training Indonesian youth.

NFU and King Mongkut's Institute of Technology Ladkrabang (KMITL) focused on aviation industry education, exploring international academic collaboration and talent cultivation.

Festival of Light and Spices – NFU's Diwali Celebration Promoting Multicultural Exchange.

Indonesian Prince Visits Taiwan, Blesses NFU with a Kris Sword, and Promotes Two-Way Exchange in Agricultural Technology and Culture.

7	NFU recruited bilingual students to provide translation and consultation services, encouraged international students to serve as English teaching assistants, and arranged co-teaching opportunities in local schools. In addition, the university enhanced religious-friendly facilities and planned intercultural sharing events to create an inclusive and diverse campus environment.
8	NFU assists international graduates to work in Taiwan by establishing an internship information webpage, providing legal and policy consultations, hosting a career fair, and connecting students with local enterprises. In 2024, NFU strengthened links with its Office of Industry–Academia Collaboration to gather international recruitment information and encourage companies to hire international students for internships and employment.
9	During NFU's anniversary celebration, Ichwan Josesoef, Director of Tourism & Transportation at the Indonesian Economic and Trade Office in Taipei, and Ibu Kartika Dewi, Vice Chairperson of the Indonesian Diaspora Network Global, attended the event. On behalf of Prince K.R.A. Tejo Bagus Sunaryo of Surakarta, a ceremonial Kris sword was presented to NFU, symbolizing recognition of NFU's contributions to cultivating Indonesian youth talent.
10	NFU hosted the Diwali Festival of Lights at the Smart Learning Center, inviting international and local students to celebrate. The event featured the Diya Lighting Ceremony and a cultural talk by Indian Ph.D. student Sanmugasundaram Ravichandran, who shared the origins and meaning of Diwali as a festival of hope and positivity.
11	In November 2024, delegations from King Mongkut's Institute of Technology Ladkrabang (KMITL) and Thaksin University (TSU) visited NFU. The collaboration with KMITL focused on aviation industry education, while an MoU was signed with TSU to promote joint research, cross-border internships, dual-degree programs, and cultural exchanges.
12	On December 30, 2024, NFU welcomed Prince K.R.A. Tejo Bagus Sunaryo, Director of Arts and Culture of the Surakarta Royal Court. A Kris Sword Blessing Ceremony and Taiwan–Indonesia cultural exchange were held, during which the prince presented a ceremonial Kris sword adorned with red and white roses to NFU President Hsin-Liang Chang. The event strengthened collaboration in agricultural technology and cultural exchange between Taiwan and Indonesia.

5 Green Environmental Performance

Material Topic Management

Facing	Environmental surface
Significant	Environmental sanitation management, environmental education, natural ecological resources
Corresponding To Gri Criteria	403, Custom issues
Corresponding Sdgs	
Policy And Commitment	1.Formulate the \Environmental Protection Policy of National Huwei University of Science and Technology\, and use education, training and publicity to enhance the environmental protection motivation of school members. 2.Promote the environmental protection work of campus life, develop a lifestyle of saving energy, cherishing happiness, loving things and reducing waste, and actively safeguard the campus and surrounding environment. 3.Improve campus landscape, enhance high-quality environmental quality, promote ecological education, and build a friendly campus; The building environment and natural ecology of high-speed rail campus, and the construction of sustainable building campus environment.
Target	1.Promote source reduction, reduce the use of disposable dishware, packaged drinking water and other primary products, reduce campus garbage, recycle resources and establish correct concepts and habits of reuse. 2.Organize courses, co-training activities and USR programs to teach faculty, students and the community about net-zero carbon emissions, green energy, resource recycling, ecological conservation and other topics, cultivate green and sustainable talents, and create a green and friendly campus. 3.The new campus develops activity spaces that comply with environmental impact assessment commitments to preserve biodiversity, and implements USR projects to promote local agricultural sustainability and ecological conservation in Yunlin
Complaint Mechanism	·Environmental Safety and Health Center, website and contact information:https://she.nfu.edu.tw/; Mailbox:she@nfu.edu.tw ·Campus Landscape Committee
Actions And Results	1.Handle the exchange of second-hand textbooks and charity sale of second-hand goods, and respond to the source reduction. 2.Set up a smart green energy demonstration field to demonstrate the development and application of smart green energy, and achieve the purpose of integrating knowledge and technology and practical training through PBL teaching methods or special practice discussions. 3.The high-speed rail campus should set up a conservation area, and the necessary buffer green space should be planned for greening and beautification; Complete the first campus tree and insect survey.

5-1 Green Campus

SDGs 3、6、7、9、11、12、13、14、15

SDGs breakdown goals 3.9、6.3、7.2、7.3、9.4、11.6、12.2、12.4、12.5、13.1、14.1、15.9

Our school formulated the \National Huwei University of Science and Technology Environmental Protection Policy\ in 2009, which utilizes education, training, and promotion to enhance the environmental protection actions of school members, implement and promote environmental protection work in campus life, cultivate a way of life that saves energy, cherishes welfare, loves things, and reduces waste, and actively maintain the campus and surrounding environment.

Our school cooperates with government policies to promote source reduction and reduce the use of disposable products such as disposable tableware and packaged drinking water; Also establish the \Key Points for Garbage Reduction and Resource Recycling Management at National Huwei University of Science and Technology\ to promote campus garbage reduction, resource recycling, and the establishment of correct concepts and habits for reuse; As for the hazardous industrial waste generated in the internship (inspection) site, a qualified cleaning and disposal organization shall be entrusted to handle it properly in accordance with regulations.

Resource Recycling and Waste Management

Source and amount of waste generated

Our school's waste is mainly divided into general waste (employee household waste) and hazardous industrial waste (practical testing sites), all of which are properly classified, stored, and cleared in accordance with regulations to avoid environmental pollution or hazards to teachers and students. The general waste portion shall be disposed of by outsourced cleaning and disposal companies in accordance with the Environmental Protection Agency's \Mandatory Garbage Classification\ policy; The hazardous industrial waste generated in the laboratory (such as organic liquid waste, inorganic liquid waste, solid waste, etc.) is regularly sent by each department's laboratory to a centralized storage location for centralized storage. The Environmental Safety Center entrusts the Ministry of Education to assist in establishing an educational institution to jointly handle the system, the National Cheng Kung University Environmental Resources Research and Management Center, to handle it on behalf of the department.

◉ Types and quantities of waste in 2024

Waste category	Types of waste	Quantity of waste (kg)
General waste	General garbage (including dead branches and leaves)	642,455
	Waste paper	19,925.5
	Scrap iron aluminum cans	608.8
	Waste PET bottles	282.9
	Waste aluminum foil packaging	82.3
	Waste glass container	1,150.5
	Waste dry batteries	0.22
	Scrap CD	0.13
	Food waste	135.3
	Other (not included in the above)	725.17
Total amount of general waste		665,365.82
Hazardous industrial waste	Abandoned drug B-0399	20
	Organic waste liquid C-0169	2,085
	Inorganic waste liquid (alkali) C-0201	425
	Inorganic waste liquid (acid) C-0202	1,965
	Solid waste C-0399	2,470
	Experimental animal carcass C-0513	0
	Medical waste C-0599	65.5
	Waste oil mixture D-1799	0
Total amount of hazardous industrial waste		7,030.5

Waste recycling

In order to effectively prevent environmental pollution, promote the correct concepts and habits of reducing campus garbage, esource recycling and reuse, improve environmental quality, and implement campus environmental protection, our school has formulated the \Key Points for Garbage Reduction and Recycling Management\ and the \Measures for the Management of Toxic and Concerned Chemicals and Hazardous Waste\, and adopted a policy of preventing garbage from falling to the ground, strengthening garbage classification and recycling, and entrusting qualified environmental protection companies to remove it to ensure proper disposal.

Reduction, Reuse, and Reuse Plan

Environmental protection policies

Our school's \Environmental Protection Policy\ consists of 11 points, which have been revised by the Safety and Health Committee meeting and submitted for discussion and approval by the Executive Council. After approval by the President, it will be announced to ensure that all units in the school follow the policy concept. To enhance the awareness of environmental protection among all faculty, staff, and students, we will use education, training, and publicity to promote the environmental action of school members, implement and promote environmental protection work in campus life, cultivate a way of life that saves energy, cherishes blessings, loves things, and reduces waste, actively maintain the campus and surrounding environment, and cooperate with the implementation of environmental protection policies to achieve the goals.

General waste reduction

Implement policies to beautify the campus, maintain the cleanliness of the campus environment, prevent garbage from falling on the ground, and set up classified garbage bins for teachers and students to use. Outsourced cleaning personnel will conduct two rounds of garbage classification to achieve the effect of reducing garbage.

Laboratory waste reduction

Promote the following matters during campus meetings, laboratory inspections, or centralized collection of laboratory waste.

a.Research units of each department should purchase chemical drugs as soon as possible to avoid expiration and disposal, or share and use with other research units.

b.If the waste can be reverse recycle by the supplier, please negotiate before purchasing and try to let the supplier recycle and dispose of it as much as possible to avoid increasing the cost of our school's transportation and disposal.

Reduce the use of disposable products

Meetings, training, and activities organized by the school

a.Do not provide disposable tableware, try to provide reusable tableware as much as possible.

b.Do not provide paper cups, disposable plastic cups, or packaged drinking water. Priority should be given to setting up water dispensers or bottled water.

c.Please prioritize ordering reusable containers for catering when handling meetings, training, and events.

d.Add the reminder phrase 'In response to reducing product usage once, please bring your own eco-friendly cup and tableware' on the notification or information.

Promotion methods: poster promotion on the bulletin board, electronic mail promotion forwarded by the whole school, and dissemination of official documents by various units within the school.

Reuse of second-hand items

Exchange of Second-hand Textbooks and the Achievements of Second-hand Merchandise Sale

Academic year	Second-hand book collection number	Donation amount of second-hand goods charity sale
110	173	28,825
111	242	24,206
112	188	16,399
113	339	22,203

Second hand textbook exchange activity to cultivate the concept of intellectual property rights: At the end of the semester, second-hand textbooks will be collected when leaving each dormitory building, and a caring second-hand book exchange activity will be held before the start of the school year. In addition to cultivating students' moral care for and love for things, it will also reduce their burden of purchasing books and cultivate the concept of intellectual property rights to legally obtain genuine books.

Second-hand goods charity sale, cultivate caring and honest morality: set up a caring and honest shop in each house, solicit second-hand goods from teachers and students of the whole school, operate them in an unmanned way, and donate the sales proceeds to the emergency relief fund or social welfare organizations of the school, so as to promote honesty and virtue and implement the concept of resource reuse.

Circulation of agricultural surplus resources

Because Taiwan Province is located in the subtropical zone, the climate is very suitable for bamboo growth. According to the report of the Ministry of Agriculture, the bamboo forest area in Taiwan Province accounts for about 183,000 hectares, accounting for 8% of the forest coverage area. It is estimated that the bamboo reserves are about 1.58 billion. In addition, according to domestic and foreign research reports, the aboveground carbon storage of bamboo in Taiwan is very considerable, which is about 26 tons for the black-shelled green bamboo treated in this project. It can be seen that the potential of carbon storage accumulated by bamboo is quite large. Moreover, bamboo has quite diverse characteristics. First, its underground stems are developed and spread widely, which has a certain effect on soil and water conservation on the hillside. Second, it has vigorous vitality and rapid growth, which has better utilization value than trees. Third, it has high toughness and can be made into appliances, furniture or buildings. However, due to the above characteristics, bamboo must be thinned regularly, otherwise the aging bamboo forest will lead to large-scale collapse of the hillside. At the same time, regular thinning also leads to excessive waste bamboo materials (the unusable part of bamboo), which also causes troubles for bamboo farmers. In order to solve the problem of agricultural surplus resources produced by black-shelled green bamboo, our school directly set up a demonstration base of bamboo industry biomass-based circular agriculture in Mayuan Village, Gukeng Township, and combined with the expertise of the Department of Power Machinery and the Department of Agricultural Science and Technology, designed a set of in-situ crushing treatment module, which can directly crush black-shelled green bamboo in situ, greatly reduce the transportation volume, and connect with the back-end granulation treatment, and then compress it into biomass fuel rods, thus becoming a sustainable fuel to replace fossil fuels.

Community service-recycling of abandoned bamboo forest materials

Experts and scholars from all walks of life visited

Conduct promotional workshops.

Campus promotion and display

Natural ecological resources

Maguang farm organic zone

Based on Yunlin for many years, our school has been deeply involved in promoting the development of organic and friendly agriculture, and is well aware of the dilemma of organic agriculture in Yunlin. Therefore, we began to take stock of the plans that can be promoted, and successfully transformed Maguang Farm from a sugarcane field into an organic area for planting organic miscellaneous grains (mainly soybeans).

Maguang Farm has introduced a variety of courses and activities, including rural life food testing sites (general courses), organic agriculture and internships, crop science, vegetable science, etc. It has also set up raptor shelters, ecological surveys, and planting honey source plants within the park to establish biodiversity. And a survey was conducted on the ecological environment changes in Taiwan Sugar Corporation's sugarcane fields, comparing the impact of changing sugarcane fields to organic planting on the ecology. Based on the 2023 statistical survey results, it was observed that there were about 152 ecological species in general sugarcane fields, while in the four years after changing to organic parks, the number of biological species had grown to 392. In 2024, ecological observation and statistics will continue to be conducted, and the number of biological species in the park will continue to increase. Currently, a total of 499 species have been observed, with plants accounting for 46.88%, insects accounting for 31.79%, and birds accounting for 12.27%. In addition, set up a raptor habitat and use dynamic monitoring cameras to observe the species of birds that stay on the habitat and the behavior of raptors living here. Currently, birds that have been observed to stay on the habitat include black winged kites, red tailed shrikes, brown backed shrikes, red doves, golden backed doves, and white headed Weng; In addition, combined with the on-site personnel in the park for recording and filming, it was also observed that the small tailed pheasant (winter migratory bird), the large pheasant (winter migratory bird), the swallow pheasant (summer migratory bird), and the Oriental Ze pheasant (autumn migratory bird) appeared in the park.

Investigation on trees and insects in the first campus

Campus ecology completed the investigation of trees and insects in the first campus, with 57 species and 683 trees, including 16 families of insects, and established a database. The height and diameter of tree species in our school were investigated by drone, which was used as the carbon sequestration database for subsequent tree planting.

Investigate the normalized difference vegetation index (NDVI) of our school with drones; NDVI), so as to analyze the data of green coverage in our school and serve as a reference for further strengthening green areas.

Ecological conservation of high-speed railway campus

Conduct an ecological survey on the ecological conservation area of the high-speed railway campus of our school, including setting traps in the sample area, setting sticky insect paper, sweeping nets, observing straight lines, etc., and conduct preliminary species identification. Based on the observed species, conduct simple identification, species recognition and counting, establish a survey roster, and conduct an ecological statistics workshop activity based on the survey results, with a total of 61 subjects and 687 individuals. In addition, 12 meters are designated within the campus2The landscape honey source plant area and grass preparation area are engaged in butterfly conservation habitat reconstruction activities. Long spike wood, Wugu Xiao, Gao's Buddha's Zelan, Taiwan Zelan, and Ma Li Jin are planted in the park as honey source plants for butterflies. European vines are also planted around the Melia azedarach tree group near the conservation area to provide food for larvae.

Our high-speed railway campus has implemented various environmental protection measures for the ecological environment during the development process, including:

1. Prior to construction, a survey was conducted on the existing large trees in the surrounding area. Trees with landscape value of more than 10 meters were preserved or transplanted on site, and 26 trees were planned to be transplanted. Planting and transplanting protection principles and tracking management methods were established to maintain the health of large trees in the campus. In addition, during the rainy season, light wax trees will be replanted and maintained, with a focus on weekly watering and tracking of growth trends. The leaves were observed and confirmed to have grown well at the end of June.
2. During the construction and operation phases, continuous ecological monitoring operations will be carried out, and regular surveys will be conducted once a quarter on local land and water animal resources to grasp the local ecological resource situation.
3. Reduce the use of herbicides and chemical fertilizers to create a diverse environmental space that is close to the natural environment.
4. Build a blue carbon farm for microalgae carbon fixation experiment and course teaching. Self-study course (marine ecology and intelligent ecological tank construction) was assisted by one teacher and two teaching assistants, and 38 students participated.

Eco-tour and the use of iNaturalist

Administer ecology by ecology to achieve ecological balance in the park.

Construction of blue carbon system

Plant replanting in high-speed rail campus

Energy use

In order to understand the use of various energy sources, our school counts the use of gasoline, diesel, electricity and natural gas respectively, so as to facilitate the necessary information analysis and disclosure. The following are the statistics of energy use.

◉ Statistics of gasoline and diesel consumption

Year	Gasoline (liter)	Diesel Oil (liter)
2022	4,655	8,455
2023	5,015	4,071
2024	4,647	4,141

◉ Electricity consumption statistics

Year	Electric Quantity (degree)
2022	12,816,999
2023	13,322,960
2024	13,920,696

◉ Natural gas quantity statistics

Year	Natural gas (degree)
2022	38,970
2023	27,169
2024	0

Note: No natural gas will be used in 2024, and it has been converted into a heat pump system.

◉ Statistics of solar power generation

In response to the development of green energy, the school has set up solar power generation facilities in the school headquarters and dormitory areas, and sold or used the generated electricity for self-use to save the cost of outsourcing electricity. From 2020 to 2022, the capacity and power generation degree of solar equipment are listed as follows.

Year	Setting Area	Set capacity (kWp)		Power generation degree	
		keep for personal use	External sale	Self-use (degree)	Foreign sales (degree)
2022	Main Campus	31.74	207.68	45,109	291,812
	Dormitory Area	-	499.96	-	670,639
2023	Main Campus	31.74	950.47	45,673	836,517
	Dormitory Area	-	499.96	-	662,001
2024	Main Campus	31.74	950.47	44,245	810,021
	Dormitory Area	-	499.96	-	629,448

Energy management measures

In addition to actively setting up solar power generation facilities to provide clean energy, the school also handles various energy-saving measures at the user end, which are explained as follows:

Project	Handling situation in 2024	Achievement benefit calculation
Contract Capacity Adjustment	Regularly review the appropriateness of the contract every six months, regularly eview the contract capacity and make adjustments to save electricity purchase costs.	—
Energy-saving Lamps Replacement	The replacement of ordinary classrooms and public spaces in the first to fourth t eaching buildings in the first campus with 1,481 LED lighting equipment was completed in July 2024 in 890 yuan with a budget of 1,585. An application for energy-saving equipment subsidy of 500,000 yuan was submitted to the Commercial Department, which is estimated to save about 30% energy consumption every year.	**The annual electricity saving is about 30374.4 kwh.**
Capacity Integration Of Xuesanshe Transformer	• The original three-phase four-wire 120/208V transformer 250KVA*1200KVA*1 was merged into 250KVA*1. • The original three-phase three-wire 220V transformer 250KVA*1 was merged into 150KVA*1. • The original three-phase four 220/380V transformer 500KVA*1 was integrated into 300KVA*1.	**The equipment is estimated to save 5% power consumption.**
Replacement Of Old Air Conditioning	We will carry out the plan of replacing old air conditioners and encourage the replacement of old air conditioners that have been used for more than 10 years. Each teaching unit will be subsidized by 10,000 yuan, and the administrative unit will be fully subsidized. A total of 130 air conditioners will be replaced, with a total fund of 6.084 million yuan. In 2025, the replacement subsidy plan will be continued, and the budget will be compiled to encourage the replacement of old air conditioners with a subsidy of 10,000 yuan per unit.	—

◉ Purchase Quantity Of Energy-saving Lamps And Air Conditioners

Annual Degree	Lamps And Lanterns	Air Conditioner
2022	911	666
2023	345	315
2024	1,481	253

Water and discharge water

The water source of our school is mainly tap water, and the generated waste water is discharged according to the regulations required by the competent authorities. There is no sewage treatment facility in the campus, and the domestic sewage is discharged into septic tanks and ditches, and the generated domestic sewage is not mixed with other wastewater. It is expected that the local sewage sewer will be taken over and incorporated into the sewage sewer system after the completion of construction.

Tap Water Intake And Water Consumption

Year	Tap Water Consumption (m3)	Average Water Consumption Per Person Per Day (lpcd) (liter/person-day)	Lpcd Increase Or Decrease (%)
2022	244,173	58.21	-3.42
2023	233,566	53.69	-7.76
2024	250,639	56.07	4.43

Water saving measures

In order to reuse water resources and avoid waste of water resources, our school has set up sewage treatment and reuse systems, rainwater storage and reuse systems and water-saving equipment in the new high-speed rail campus. The specific implementation details are as follows:

Sewage treatment and reuse system of new high-speed rail campus

The high-speed rail campus plans to set up a sewage treatment plant on the south side of the parking lot, and collect the domestic sewage (rain and sewage diversion) generated in the area in a special way and send it to the sewage treatment plant for treatment; After meeting the water quality standard of \Discharge Water Standard\, it will be discharged into reclaimed water landscape storage tank, which will be used as campus landscape vegetation watering, road cleaning, toilet flushing and supplementary water for landscape pool.

Rainwater storage and reuse system

In order to strengthen the utilization of water resources, the Arts and Sciences Building in the third campus of our school is equipped with rainwater recycling facilities. In addition, the high-speed rail campus refers to the \Technical Specification for Design of Rainwater Storage and Utilization in Buildings\ by the Construction Department of the Ministry of Interior, and sets storage tanks, water filtration facilities and disinfection facilities on the raft foundation of buildings to recycle rainwater. The reuse purposes are mainly used for watering vegetation, sprinkling water on roads or flushing toilets.

At present, the buildings planned to be set up in the international industry-university cooperation zone and teaching zone are estimated with the rainwater collection area of 12,000 on the top floor of each building, and the average rainwater collection in each period is: Wr=R (daily average rainfall of the base) ×Ar (rainwater collection area)× P (daily rainfall probability).

Rainwater collection in the first and second phases:

=4.68mm/ day× 6,000× 0.273 = 7,665.84 (L/day) ≒ 7.67cmd.

Long-term rainwater collection:

=4.68mm/ day× 12,000× 0.273 = 15,331.68 (L/day) ≒ 15.3cmd.

Water-saving equipment

Water-saving equipment such as faucets, toilets and urinals in our school has been gradually replaced by water-saving equipment to reduce water consumption.

Setting of water-saving equipment (toilet)

	Urinal	High Tank Toilet		Low Tank Toilet		Quick Flush Toilet (flush Valve)	
		General type	Water Saving Type	General Type	Water Saving Type	General Type	Water saving type
The Gents	802	249	1	38	65	141	56
Female Toilet	—	56	56	114	105	38	167
Amount To	802	305	57	152	170	179	223

Setting of water-saving equipment (faucet)

	General faucet		Self-closing faucet	Induction faucet
	Non-water saving type	Water saving type		
Amount To	914	676	2	20
Installation Rate Of Water-saving Equipment	55.71%			

Water quality management

In Order To Ensure The Quality Of Water And The Cleanliness And Hygiene Of Drinking Water, Our School Adopts The Following Water Quality Management Measures To Maintain The Hygiene Of Water Quality Used By Staff And Students:

- The 85 Water Towers Or Reservoirs In Our School Are Regularly Cleaned, And The Cleaning Frequency Is Once Every Two Years.
- All The 260 Drinking Water Equipment In Our School Handle The Business Of Drinking Water Equipment In Water Quality Inspection On A Regular Basis, And The Testing Frequency Is Once Every One And A Half Years.
- The 15 Ro Filtration Equipment And 260 Drinking Water Equipment In Our School All Handle The Water Equipment Maintenance Business Regularly, And The Frequency Is Once A Month.

Water resources conservation in high-speed rail campus

The High-speed Rail Campus Of Our School Promises In The Statement Of Environmental Impact Assessment As Follows:

- No Groundwater Is Pumped During Construction And Operation.
- The Partially Permeable Design Of Flood Detention Basin Can Not Only Replenish Groundwater, But Also Help To Avoid The Continuous Subsidence Of The Stratum.
- The Design Of Permeable Pavements For Statutory Open Spaces, Open-air Parking Lots And Sidewalks Within The Development Scope (areas Outside The Coverage Rate) Has Increased The Infiltration Area Of Groundwater.
- Voluntary Reduction Of The Statutory Shielding Rate From 60% And 180% To 50% And 150% Respectively, Which Has Increased The Permeable Area Of The Base Compared With The Shielding Rate.

To Sum Up, The High-speed Rail Campus Base Is 17.181 Hectares, And The Planned Total Base Permeable Area Is 10.34 Hectares, Accounting For 60.2% Of The Total Area.

Indoor air quality

In Response To The Indoor Air Quality Management Law Of The Ministry Of Environment, In Order To Protect Readers From Long-term Exposure To Substances That Directly Or Indirectly Harm The Health Or Living Environment, Including Carbon Dioxide, Carbon Monoxide, Formaldehyde, Bacteria, Fungi, Etc., Our Library Has Been Listed As A Public Notice Place Since 2014, And Has Actively Strengthened A Series Of Measures Such As Building Construction, Hardware Planning And Personnel Training For Indoor Air Quality, And Obtained An Excellent Grade Seal In 2021 (the Effective Period Of The Seal Is 2021)

In 2024, The Air Circulation Of Library Buildings Will Be Improved, And A New Fan Will Be Installed To Achieve The Function Of Ventilation. The Outdoor Air With High Oxygen Content Will Be Sent To The Library Room After Purification By The Fresh Air System, And The Indoor Turbid Air Will Be Discharged To The Outside To Achieve The Ventilation Effect, So That The Closed Room Can Also Have Pure And Fresh Living Oxygen And Good Air.

In 2024, The Air Quality Detector Will Be Tested And Calibrated Annually According To The Maintenance Specifications, So As To Comply With The Provisions Of The Controller Quality Management Law.

◉ Library Air Quality Test Data

Detection Position	Test Item	Detection Value	Standard Value	Remarks
5f Japanese Reading Area	Carbon Dioxide	545ppm	1000ppm	Qualified
	PM_{10}	17μg/m^3	75μg/m^3	Qualified
	Formaldehyde	0.003 ppm	0.08 ppm	Qualified
	Germ	179CFU/m^3	1500CFU/m^3	Qualified
4f Chinese Library Area	Germ	83CFU/m^3	1500CFU/m^3	Qualified
3f Before The Audio-visual Data Group	Germ	173CFU/m^3	1500CFU/m^3	Qualified
2f Reading Area	Germ	95CFU/m^3	1500CFU/m^3	Qualified
1f New Book Exhibition Area	Germ	71CFU/m^3	1500CFU/m^3	Qualified

Note: It is scheduled to be tested every three years, and the school did not test it in 2024. The data is that Taiwan Province Inspection Technology Co., Ltd. was entrusted to conduct sampling on January 10-11, 2023, and the test report was provided on February 1 of the same year. .

The concentration of carbon dioxide in the sustainable area is 522ppm, which is lower than the indoor air quality standard of 1000ppm.

Seal for excellent indoor air quality

5-2 Highlights Of Environmental Sustainability Promotion

SDGs 2、3、7、9、13、17

SDGs Breakdown Target 7.a、9.4、13.3、17.17

Demonstration Field Of Rainwater Recovery System And Carbon Fixation System Of Weizao

In 2024, A Rainwater Harvesting System And A Microalgae Carbon Sequestration Demonstration Site Were Established At National Formosa University, With Completion Expected In 2025. The Rainwater Harvesting System Is An Eco-friendly And Water-saving Solution That Utilizes Collected Rainwater For Irrigation, Cleaning, And Other Purposes. This Reduces Reliance On Public Water Supplies And Lowers Water Costs. Its Advantages Include Water Conservation, Environmental Protection, And Economic Benefits. Additionally, It Helps Mitigate Urban Flooding Risks And Improves Water Environments.

The Microalgae Carbon Sequestration System Represents An Important Sector Of The Nation's 2050 Net-zero Emissions Policy Under Carbon Sink Initiatives. This System Draws On The Expertise Of The University's Department Of Biotechnology, Leveraging Microalgae's High Carbon Fixation Capacity To Promote Environmental Sustainability On Campus. Beyond Accelerating The Development Of Local Microalgae Research, It Also Provides Essential Facilities For Cultivating Talent In Microalgae-based Carbon Sequestration And For Advancing Research In Photobioreactor Applications. The Demonstration Site Not Only Serves As A Platform For Research And Teaching But Also Showcases Its Application Potential In Practice, Raising Environmental Awareness. Through Collaboration With Academia And Industry, Research Outcomes Can Be Extended To Broader Regions, Offering Practical Solutions To Climate Change.

In Microalgae Application Research, Scaling Up From Laboratory-level Flasks To Photobioreactors Suitable For Field Applications Has Long Been A Focus For Both Academia And Industry. The Establishment Of This Carbon Sequestration System, Combined With Intelligent Sensors For Collecting Essential Data, Significantly Enhances Microalgae Carbon Fixation Efficiency And Boosts The University's Research Capacity In This Field. During The Gas Collection And Aeration Processes Of The Microalgae System, Air Is Effectively Scrubbed And Filtered, Indirectly Improving Local Air Quality. After Cultivation, The Algal Biomass Can Be Used As Feed For Agriculture And Livestock, In Experiments Extracting Algal Oil And Nutrients, Or As A Food Source For Aquatic Organisms In Constructed Wetlands—forming An Essential Link In A Complete Ecosystem.

Microalgae Possess High Carbon Absorption Capabilities, Converting Atmospheric Carbon Dioxide Into Biomass, Making Them A Key Strategy For Achieving Net-zero Emissions. The Microalgae System Can Also Serve As An Educational Tool, Enabling Students, Local Communities, And Schools To Participate Directly And Learn About Carbon Capture Technologies, Thereby Raising Environmental Awareness And Scientific Literacy. Furthermore, Algal Biomass Can Be Converted Into Biofuels, Fertilizers, Or Other Valuable Products, Realizing Resource Recycling. By Implementing The Microalgae Carbon Sequestration System, The University Sets An Example In Sustainable Development And Innovative Technologies, Enhancing Its Social Responsibility Image And Academic Influence.

5-3 Sustainable Supply Chain

SDGs 12

SDGs breakdown target 12.7

All Procurement Activities Of The University Are Conducted In Accordance With The Government Procurement Act. Under Government Regulations, A Certain Proportion Of The Procurement Budget Must Be Allocated To Priority Procurement. “priority Procurement” Is A Measure Established By The Government To Protect The Rights And Interests Of Persons With Disabilities. It Requires Public Institutions To Give Priority To Purchasing Products Manufactured And Services Provided By People With Disabilities.

Global Resources Are Limited, And The Concept Of Environmental Protection Has Gradually Emerged In Recent Years. In Order To Respond To Environmental Protection And Move Towards Sustainable Development, Our School Is Committed To The Direction Of Green Procurement, Giving Priority To Products With Environmental Protection Labels, Reducing The Impact Of Procurement On The Environment, And Implementing Sustainable Development And Social Responsibility.

Priority Procurement And Green Procurement Statistics

Year	Priority Procurement		Green Procurement	
	Purchase Amount (yuan)	Purchase Ratio (%)	Purchase Amount (yuan)	Purchase Ratio (%)
2022	341,660	5.04	48,848,595	99.53
2023	443,780	5.97	31,655,046	99.91
2023	270,700	5.18	29,024,685	96.09

註: Fillpriority Should Be Given To Purchasing Goods And Services Produced By Welfare Institutions Or Sheltered Workshops For The Physically And Mentally Handicapped, And The Ratio Should Reach 5% According To The Regulations Of The Ministry Of Health And Welfare.

Calculation Method Of Priority Purchase Ratio: (priority Purchase Transaction Amount+announced And Negotiated Transaction Amount)/ transaction Amount Without Priority Purchase.

Calculation Method Of Green Purchasing Ratio: Total Amount Of Products With Environmental Protection Label Purchased By Specified Project/ total Amount Of Products Purchased By Specified Project.

5-4 Climate Risk And Countermeasures

SDGs 4、13

Sdgs Breakdown Target 13.2、13.3

Greenhouse Gas Inventory

In Response To The Climate Change, Our School Will Conduct Greenhouse Gas Inventory On The Facilities And Equipment That Will Produce Greenhouse Gases In The School From 2021, Collect The Emission Quantity Of Greenhouse Gases, And Calculate The Emission Equivalent According To The GreenhouseGas Emission Coefficient And Global Warming Potential (gwp)Of Each Project. The Results Of Greenhouse Gas Inventory In2024 Are Shown In The Table, And The Greenhouse Gas EmissionIn 2024 Is 13,385.429 Metric Tons Of Co2e. The Boundary Of OurCarbon Inventory Organization Is The First, Second And Third Campuses.

◉Greenhouse Gas Inventory In 2024

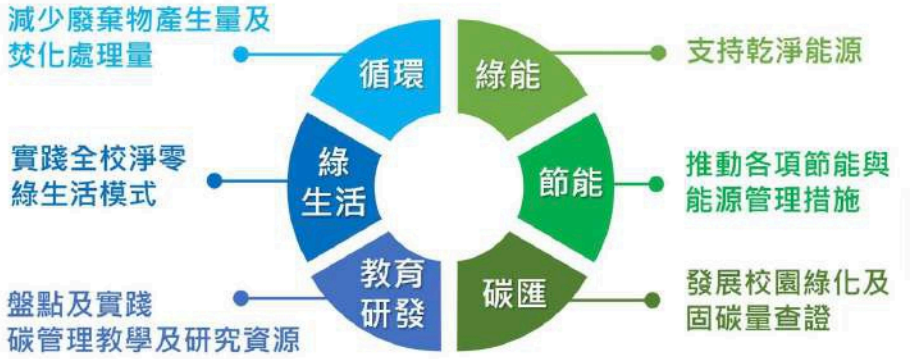
Emission Source Categories 1 To 6	Emission Source	Emission Equivalent (metric Ton Co2e/ Year)	Totalling
Category 1: Direct Greenhouse Gas Emissions And Removal			
Direct Emission From Stationary Combustion Sources	Emergency Generator (diesel), Natural Gas Boiler	64.8827	4,971.6933
Direct Emission From Mobile Combustion Sources	Leaf Blower, Lawn Mower, Official Vehicle (gasoline And Diesel)	23.7687	
Effuse	Septic Tank, Fire Extinguisher (co2, Environmental Protection Gas), Refrigerant (refrigeration And Freezing Equipment, Drinking Fountains, Air Conditioners)	4,883.0419	
Category 2: Indirect Greenhouse Gas Emissions Generated By Input Energy.			
Indirect Emissions From Input Power	Outsourced Electricity	5,782.5018	5,782.5018
Categcategory 3: Indirect Greenhouse Gas Emissions From Transportation			
Emissions From Employees' Business Trips	Business Travel	54.1479	1723.4871
Emissions From Employees' Commuting	Staff And Student Commuting	1669.3392	
Category 4: Indirect greenhouse gas emissions from products used by organizations			
Greenhouse Gas Emissions From The Mining, Manufa cturingAnd Processing Of Purchased Raw Materials	Natural Water	39.0997	907.7470
	Paper Use	13.0434	
	Transformer Box	611.0000	
	Outsourcing Of Waste	244.6039	
Category 5: Indirect Greenhouse Gas Emissions Associated With The Organization's Product Use			—
Category 6: Indirect Greenhouse Gas Emissions From Other Sources			—
Total Emissions Of Categories 1-6	13,385.429 Metric Tons Co2e/year		

Net Zero Carbon Emission Path

Build An Organization	In Order To Promote Carbon Reduction Measures, The National Huwei University Of Science And Technology Campus Greenhouse Gas Inventory And Voluntary Reduction Implementation Committee Set Up Methods In October 2022 To Implement The United Nations Sustainable Development Goals And Cooperate With The Development Of The National Overall Greenhouse Gas Reduction Strategy To Achieve The Campus Sustainable Development And Carbon Neutral Carbon Reduction Goals.
Greenhouse Gas Inventory	In 2022, The Dean Of Our School Signed A Consent Letter To Authorize The Greenhouse Gas Inventory And Verification, Authorizing The Deputy Dean To Coordinate The Related Business, And The Sustainability Department, The General Affairs Department And The Environmental Safety Center Jointly Initiated The Campus Greenhouse Gas Inventory And Voluntary Reduction Review The Results Of The Inspection From . 2021 To 2023 Were Verified By Third Parties, And The Inspection Opinion Certificates With Reasonable Assurance Level Were Obtained The School Looks Forward To Implementing Greenhouse Gas Management With Independent Inventory As A Starting Point And Contributing To Global Carbon Reduction Annual Greenhouse Gas Inventory Declarations
Talent Cultivation	Tiger University Continues To Cultivate Sustainable Development Talents. In 2024, It Has Cultivated 62 Iso14064 (iso14064-1, 14064-2) Talents, 58 Iso14067 Product Carbon Footprint Talents, 31 Iso14068 Carbon Neutral Training Talents, And 32 Esg Report & Sustainability Managers. It Is Planned To Continue To Cultivate Carbon Management Talents In 2025.
Net-zero Carbon Emission Goals And Strategies	With The Vision Of Becoming A Sustainable Carbon Reduction Campus, National Huwei University Of Science And Technology Has Formulated Net-zero Carbon Emission Goals And Strategies, And Continues To Promote Various Energy Conservation And Carbon Reduction Work, Including Green Building Design, Promoting Green Campus And Net-zero Green Life, Building Energy Management Systems, Solar Photovoltaics, And Replacing Energy-saving Equipment, Etc., To Enhance The School's Resilience In Response To Climate Change And Move Towards The Sustainable Goal Of Net-zero Carbon Emissions By 2048.

Signing Of The Declaration On Net Zero Carbon Emissions In 2048 And Its Path Time-history

On April 22, 2024, The First Sustainable Week Of Huust Officially Announced The Goal Of Zero Carbon Emissions, And President Zhang Xinliang Signed The Declaration Of Zero Carbon Emissions Of Huust In 2048, Which Promoted The Path Of Zero Carbon Emissions With Six Strategies, Including Green Energy, Energy Saving, Carbon Sink, Recycling, Green Living And Education Research And Development. Taking 2022 As The Base Year, The First Phase Will Be Reduced By 15% In 2028, And The Second Phase Will Be Implemented.



President Hu Keda Signed The Declaration Of Net Zero Carbon Emissions In 2048.

Hukeda 2048 Net Zero Carbon Emission Declaration

Climate Risk And Coping Behavior

In Order To Assess The Potential Risks Of Climate Change To Huust And Formulate Countermeasures, Our School Follows The Framework Of Climate-related Financial Disclosures (tcfd), Identifies The Climate Risks And Opportunities That Affect The Sustainable Operation And Operation Objectives, And Makes Assessments And Rolling Corrections For Highly Sensitive ssues. Relevant Committees Have Been Set Up In The School To Promote Sustainable Development, Greenhouse Gas Inventory And Voluntary Reduction, And Major Issues May Be Submitted To The School Council For Discussion And Resolution.

Response To Climate Change → **Climate Change Risk And Opportunity** → **Climate Change Risk And** → **Climate Change Risks And Opportunities Response** → **Climate Change As Monitoring And Communication**

1 Climate Change Risk And Opportunity Identification

Our School Adopts Tcfd's Suggested Framework To Conduct 16 Climate Situation Risk Analysis, Covering Transition Risk (technology, Policies And Regulations, Reputation, Market), Entity Risk (short-term) And Opportunity Orientation (resilience, Energy Sources, Teaching Services). After Internal Discussion Of Each Scenario, The Overall Climate Risk And Opportunity Are Evaluated As The Basis For Future Adjustment And Mitigation Strategies.

2 Climate Change Risk And Opportunity Assessment

Members From All Units Of Our School Were Invited To Score The 16 Proposed Climate Change Risk Scenarios In Terms Of Impact (1-3 Points) And Incidence (1-3 Points), And Put Them Into The Risk Matrix As The Basis For Dealing With Climate Change Risks And Opportunities.

In The Risk Matrix Analysis, Those With Impact Degree (3 Points) And Incidence Rate (3 Points) Are Listed As The Most Significant Risks Or Opportunities. If Those With Impact Degree (3 Points) Or Incidence Rate (3 Points) Are Considered As Major Projects, We Still Have To Respond And Deal With Them. According To The Results Of Situation Analysis, The Following Results Of Risk Matrix Are Obtained.

Risk Matrix Table

Occurrence Degree	Impact Degree		
	Low (1 Point)	Medium (2 Points)	High (3 Points)
High (3 Points)	・reporting On Carbon Emissions (transition Risks-policies And Regulations) ・rising Energy Costs Affect School Costs (transition Risk-market) ・make Good Use Of National Energy-saving Or Low-carbon Incentives (opportunity-resilience) ・promote Green Procurement On Campus And Reduce Temperature Emission (opportunity-energy Resource Source) ・planning Of Innovative Plans For Schools In Response To Climate Change (opportunities-teaching Services)	School Climate Change Plan and Implementation (Opportunities-Teaching Services)	・as The Temperature Rises, The Air Conditioner Increases, And The Cost Of Electricity Increases (transition Risk-technology) ・requirements Of National Carbon Emission Policy (transition Risk-policies And Regulations) ・the Cost Of Carbon Tax (transition Risk-policies And Regulations) ・stakeholders Pay More Attention To The School's Response To Climate Change, Or Have A Negative Evaluation (transition Risk-reputation) ・extreme Climate Change Is Great, So Schools Should Plan To Take Countermeasures (physical Risk-short-term)
Medium (2 Points)	—	—	—
Low (1 Point)	・the Change Of Rainfall Pattern Causes The School To Be Flooded, Which Increases The Cost Of Restoration (physical Risk-medium Term) ・shortage Of Water Resources Causes Impact On School Operation (physical Risk-medium Term) ・in Response To The Demand For Green Energy, Schools Need To Build More Solar Facilities (transition Risk-technology) ・in Response To Climate Change, Schools Offer Courses On Environment And Climate Change (opportunity-teaching Service). ・schools Promote Measures To Reduce Water Consumption And Water Consumption (opportunity-water)		

3 Climate Change Risk And Opportunity Response Processing

According To The Above Analysis, Major Projects Such As Risks And Opportunities Are Identified, And The Response Of Our School Is Summarized As The Following Table:

Type		Climate-related Issues	Description Of Risks/opportunities	Potential Financial Impact	Management Measure
Transformation Risk	Technology	Temperature Rise Increases Energy Use.	As The Temperature Rises, The Air Conditioner Increases, And The Cost Of Energy Consumption By Electric Shock Increases.	Squeeze Out The Existing Budget Scale And Increase The Financial Burden.	1.Replace The Old Energy-consuming Air Conditioners. 2.The Temperature Of The Air Conditioner Is Set At 26-28 Degrees And The Air Conditioner Is Turned Off At A Set Time To P revent People From Leaving The Power Supply. Replace Energy-consuming Lamps.
	Policies And Regulations	Requirements Of National Carbon Emission Policy	Put Forward Voluntary Reduction Projects By Themselves Or Jointly, So As To Implement Greenhouse Gas Reduction Measures, Apply To The Central Competent Authority For Approval To Obtain The Reduction Quota, And Use It According To Regulations.	The Implementation Of Carbon Reduction Measures Requires Investment In Hardware Construction Funds.	According To The Program Of The Ministry Of Education.
		The Cost Of Carbon Tax	1.Our School Is Not The Target Of \carbon Fee\ Planned By The Ministry Of Environment. 2.The Area Of Green Trees On Campus Is More Than 60%, Which Can Absorb A Lot Of Carbon Dioxide.	If A Carbon Tax Is Levied, The School Should Allocate Funds To Pay For It.	Continue To Publicize The Policy Of Energy Conservation And Carbon Reduction, And Implement Carbon Reduction Measures (such As Controlling Air Conditioning Temperature, Replacing Energy-consuming Equipment, Etc.).
		To Report On Greenhouse Gas Emissions.	Conduct \campus Greenhouse Gas Inventory\.	If An External Agency Is Entrusted To Verify The Statement Of Greenhouse Gas Inventory Management, It Must Pay The Verification Fee.	Establish A Campus Greenhouse Gas Inventory And Voluntary Reduction Implementation Committee. From 2021, The Campus Greenhouse Gas Emissions Will Be Inspected Year By Year. After Verification, The Information Will Be Published On The School Website And The Sustainability Report.
	Reputation	Stakeholders Pay More Attention To The School's Response To Climate Change, Or Have Negative Comments.	1. With The Increase Of School Cost, Financial Resources Must Be Increased. 2. With The Rising Energy Cost, It Is Necessary To Strengthen The Energy-saving Improvement Measures In Schools.	1. The Number Of Students Has Decreased 2. Decreased Income 3. Increased Financial Costs	1. Continue To Implement Green Campus Measures. 2. Committed To Promoting The Transformation Of Low-carbon Campus. 3. Enhance The Image Of The School
	Market	Rising Energy Costs Affect School Costs.	In Response To The Extreme Climate, Taking Corresponding Measures Can Fulfill The Responsibility Of The School.	Squeeze Out The Annual Budget Scale And Increase The Financial Burden.	1.Replace The Old Energy-consuming Air Conditioners. 2.The Temperature Of Air Conditioner Is Set At 26-28 Degrees, And It Is Turned Off At A Set Time To Prevent People From Leaving The Power Supply. 3.Replace Energy-consuming Lamps. 4.Establish A Monitoring And Electricity Consumption Data System To Master The Electricity Consumption Situation In Schools.
Entity Risk	Short-term	Extreme Climate Change Is Great, So Schools Should Plan To Take Countermeasures.	In Response To The Extreme Climate, Taking Corresponding Measures Can Fulfill The Responsibility Of The School.	If Countermeasures Are Taken, Funds Need To Be Allocated For Handling.	1. Build Solar Energy Equipment To Reduce Outsourced Power. 2. Take Carbon Reduction Measures To Reduce The Impact On Greenhouse Gas Emissions.
Chance	Toughness	Make Good Use Of National Energy-saving Or Low-carbon Incentives.	It Is Necessary To Plan Specific Energy Saving Or Carbon Reduction Schemes, Apply For Awards And Get Government Awards, And Can Pay Attention To Improvement Funds.	Funds Must Be Invested For Improvement.	Apply For Subsidies For Energy-saving Equipment And Accelerate The Replacement Of Energy-consuming Equipment.
	Source Of Energy Resources	Promote Green Procurement On Campus And Reduce Temperature Discharge.	Green Procurement Can Promote Environmental Sustainability And Fulfill School Responsibilities.	Continue And Increase The Purchase Of Green Procurement Projects.	Strengthen Propaganda And Improve The Ratio Of Green Procurement.
	Teaching Service	The School Plans Innovative Projects In Response To Climate Change.	Guide Students To Learn Energy-related Knowledge And General Disaster Response Measures To Improve Technological Development In Related Fields.	Inter-ministerial Meetings Will Integrate Unpredictable Natural Disaster Response Measures To Enhance The Growth Of Cooperation Projects.	Encourage Research Institutes And Students To Pay Close Attention To Issues And Technologies Related To Climate Change. 1. Subsidy Measures To Encourage 2. Handling Related Courses Such As Automation Will Help Improve The Efficiency Of The Industry.
		The School's Plan And Implementation Of Coping With Climate Change.	Improve Teaching Energy And Improve Professors' Research And Development Of Related Projects.	Inter-ministerial Meetings Will Provide Suggestions On Unexpected Natural Disasters, And Increase Research And Grant Cases.	Handling Environmental Risk Assessment Technology Courses And Obtaining Licenses; Improve The Functions And Licenses Related To Climate Change.

4 Climate Change As Monitoring And Communication

Facing The Challenges Of Compound Natural Disasters And The Shortage Of Hydropower Resources, The Cost Of School Operation And Contingency Is Increasing. In Addition To Promoting Energy Conservation And Carbon Reduction, Replacing High-energy-consuming Equipment And Building A Solar Photovoltaic System, Our School Also Continuously Examines Climate Change Management Measures And Evaluates Their Effectiveness. Through The Business Operation Of Each Unit, It Evaluates Disasters And Energy Risks, And Then Puts Forward Specific Adjustment And Mitigation Countermeasures. At The Same Time, Through Courses, Activities And Sustainability Reports, The School Has Also Conveyed To Students And Stakeholders The Measures To Deal With Climate Change, Deepened The Concept Of Energy Conservation And Carbon Reduction, And Promoted The Implementation Of Sustainable Actions.

6 Sustainable Social Integration

Material Topic Management

Facing	Social Aspect
Significant	University Social Responsibility (usr) Practice
Corresponding To Gri Criteria	413
Corresponding Sdgs	
Policy And Commitment	On August 1st, 2022, Our School Formally Established The \sustainable Development And Social Responsibility Division\, Which Is Also The First School In China To Promote The Development Of Sdgs In Our School And Implement University Social Responsibility (usr) Related Affairs.
Target	With The Call Of \huke's Co-presence\, The \yunlin Action Think Tank\ Is Established To Solve Local Problems, Promote The Common Development Of The Field, And Carry Out The Planning And Practice Of Talent Cultivation And Local Connection.
Complaint Mechanism	・Sustainable Development And Social Responsibility Division, Website And Contact Information: https://ossr.nfu.edu.tw ・Mailbox: Nfuossr@nfu.edu.tw
Actions And Results	1.In 2024, The Usr Project 3, The Usr Hub Project 6, And The Second Goal Of The Deep Cultivation Project, \sustainable Symbiosis In The Huweixi River Basin\, Were Handled, And The Usr Spirit Was Internalized Into The Dna Of Teachers And Students Through Deepening Year By Year. 2.In 2024, Community Volunteer Education Will Give Priority To Summer And Winter Camps. Seven Teams Of Nearly 300 Students From 17 Departments Will Go To Nearly 400 Children In 7 Elementary Schools To Handle Various Activities. 3.In 2024, There Were 48 Junior College Students Participating In The Dream Project For Rural Areas, And There Were 9 Junior High Schools With 76 Classes, With 270 Junior High School Students. 4.There Are A Total Of 8 Local Cultural Centers In Yunlin County, And The Usr Spirit Is Actually Exerted.

6-1 University Social Responsibility USR

SDGs 4、8、11、13

Sdgs Breakdown Target 8.9、11.3、11.a

In The Course Of Local Practice Over The Years, In View Of The Current Development Of Yunlin Area, Our School Has Found Out The Difficulties That Need To Be Solved Urgently, Such As Uneven Teaching Resources In Rural Areas, Local Aging Society, Agricultural Safety And Soil Deterioration, Net Zero Carbon Emission, Lack Of Cultural Self-confidence And Artistic Ability, And Can Be Summarized As \population \, \education\, \agriculture\ And \culture\. In 2022, Our School Established The \Division\ (a First-class Unit) To Co-ordinate The Overall Development Strategy Of Our School In Usr, With The Integration Of Sdgs Indicators Horizontally And Vertically, To Promote The Relevant Sustainable Policies In Our School, To Cultivate The Community Of Teachers And Students, To Promote The Social Practice Service Of Social Responsibility Practice Education Courses, To Link The Cooperation Of Local Units, To Integrate The Professional Advantages Of Our Teachers And Students, And To Solve Local Problems.For A Long Time, Huwei University Of Science And Technology Has Been Accompanying Local Growth And Cultivating Local Students. With The Call Of Tiger's \co-presence\, It Has Established The Goal Of \yunlin Action Think Tank\ To Solve Local Problems, Promote The Common Development Of The Field, Promote The Practice Of Local Social Responsibility, Carry Out The Planning And Practice Of Talent Cultivation And Local Connection, And Incorporate It Into The Medium- and Long-term School Affairs Development Plan To Revitalize The Overall Development Blueprint Of Nfu Usr-set The Goal In The Near-medium And Long-term Stage.

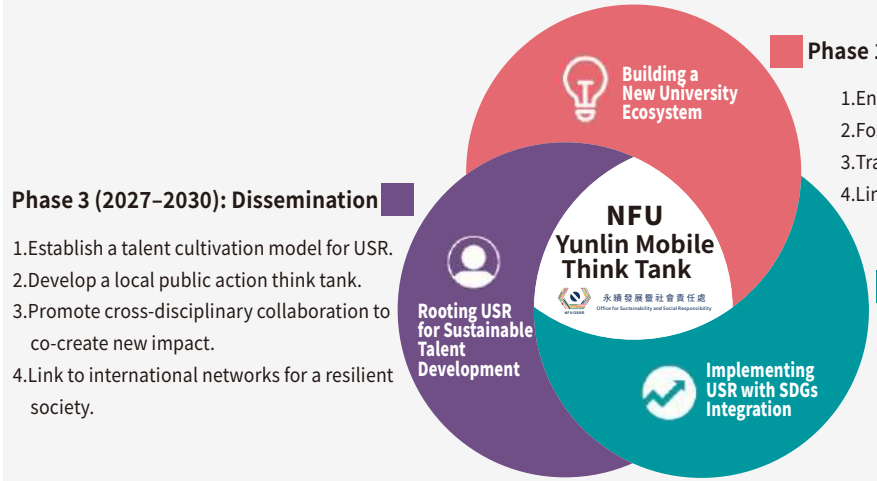
In 111, Our School Integrated University Social Responsibility Into School Affairs Management, Gradually Reformed The System, Flipped The Curriculum And Deepened Sdgs. In 113, We Linked Local Advantages With \yunlin Action Think Tank-the Sustainable Symbiosis Of Huweixi River Basin\ And Improved The Overall School Affairs To Support The Usr Team's Implementation Through The Construction Of A New University Ecosystem. The Specific Results Are As Follows:

Project	Unit	Amount To
Joint Training Activities (including Sig Community Exchange)	Site	48
Other Activities (usr Related Lecture Activities)	Site	53
Field Activities' (such As Local Practical Activities, Workshops, Camps, Etc.)	Site	170
Meetings (such As Consultation, Coordination, Consensus And Discussion Meetings, Etc.)	Site	66
Number Of Teachers Participating In The School	Person-time	1,076
Number Of Students Participating In The School	Person-time	6,639
Attendance Of School Assistants	Person-time	1,062

Usr Achievement Report Over The Years
Https://ossr.nfu.edu.tw/news.php? Pa=getachievementlist

Image Record Of Usr Achievements In 2024
Https://ossr.nfu.edu.tw/news.php? Pa=getvideolist&category=18

Nfu Usr Overall Development Blueprint



Phase 1 (2024): Continuous Transformation

1.Encourage innovative teaching by faculty.
2.Foster autonomous learning among students.
3.Transform and reform school systems.
4.Link with local communities to deepen strengths.

Phase 2 (2024–2026): Deepening

1.Integrate SDGs into faculty curriculum design.
2.Enhance students' SDG literacy.
3.Embed SDGs into campus life.
4.Align industry connections with SDGs.

Phase 3 (2027–2030): Dissemination

1.Establish a talent cultivation model for USR.
2.Develop a local public action think tank.
3.Promote cross-disciplinary collaboration to co-create new impact.
4.Link to international networks for a resilient society.

6-2 USRAchievements

Social Responsibility Of Universities Should Be Incorporated Into The Development Plan Of School Affairs.

1 Practice In Place. Highlights And Awards

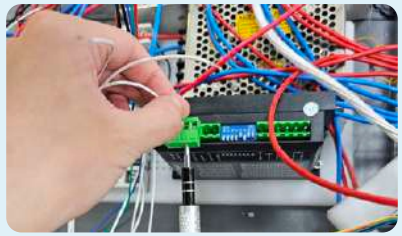
- Vision Usr University Social Responsibility Award \first Prize Of Ecological Common Good Group\ (won The First Prize For Three Consecutive Years)
- Taiwan Province University Award \taiwan Province University Award For Excellence\ And \silver Level Of Sustainability Report\
- Asia-pacific And Taiwan Province Award For Sustainable Action (2 Gold, 1 Silver And 5 Bronze).
- Taipei Golden Eagle Microfilm Exhibition-yunlin Nong Huli Won The \bronze Award\ (produced By Usr Filming Team)

2 Cross-domain T-usr Teacher Community

The Teacher Professional Growth Communities Are Dedicated To Promoting Teachers' Professional Development And Instructional Innovation, Emphasizing Interdisciplinary Collaboration And Resource Sharing To Enhance Overall Educational Effectiveness. This Program Encourages Teachers To Voluntarily Form Communities That Integrate Cross-disciplinary Knowledge Exchange And Explore Diverse Topics In Depth, Including Usr (university Social Responsibility) Field Practices, Integration Of Sdgs Into Curricula, And The Innovative Development Of Teaching Materials.
In 2024 (year 113 Of The Roc Calendar), 20 Communities Were Approved, Attracting Active Participation From 90 Teachers Both Within And Outside The University. Each Community Demonstrated Diverse And Practical Achievements, Injecting New Energy And Perspectives Into Teachers' Professional Growth.

3 Sdgs Student Teams: Fostering Self-directed Learning

In Recent Years, Trends Such As "green-collar Talent," "net-zero Carbon Emissions," And "circular Design" Have Increasingly Permeated Campuses. To Encourage Students To Confront Sustainability Issues By Combining Professional Knowledge With Creative Ideas To Propose Sustainable Action Strategies—and To Further Implement Them On Campus Or In Local Communities—the Office Of Sustainability Organized The 2024 Sdgs Student Team Selection. A Total Of 21 Proposals Were Submitted, With Students Developing Innovative Ideas Inspired By The Sdgs To Foster Self-directed Learning And Sustainable Practices. Ten Finalist Teams, Involving 32 Students In Total, Were Awarded, Including Projects Such As "authentic Indigenous—nationwide Indigenous Education Program," "changhua Tech Connects," And "becoming A Different Generation."


Recyclable 3D Printing Team


Lack of funding – Developing a toilet paper sensor


Authentic – National Indigenous Education Program Team


Animal Watcher


MaZao Design – Handmade Paper Gift Box Packaging Design


Be a Different Kind of Hero – Elders' Association


Chang Gong Is Here – For Ocean Sustainability


Upcycled Valuable Products from Waste Plastic Containers


New Southbound Delights – Handmade Jelly Flowers

4 The First Sustainablity Week | Practicing Green Living, Shaping A Green Campus

With The Vision Of Becoming A Sustainable, Low-carbon Campus, National Formosa University Has Set Net-zero Carbon Emission Goals And Strategies, Continuously Advancing Various Energy-saving And Carbon-reduction Initiatives. These Include Green Building Design, The Promotion Of A Green Campus And Net-zero Green Lifestyle, The Establishment Of An Energy Management System, The Installation Of Solar Photovoltaic Systems, And The Replacement Of Energy-efficient Equipment. These Efforts Strengthen The University' s Resilience To Climate Change And Move Steadily Toward The Sustainable Target Of Achieving Net-zero Carbon Emissions By 2048.

In Response To World Earth Day, The Office Of Sustainability Launched The First Sustainability Week In 2024, Themed "net Zero Sustainability, Nfu Must Act." Under The Slogan "practicing Green Living, Shaping A Green Campus," The Program Focused On Seven Aspects Of Daily Life—food, Clothing, Housing, Transportation, Education, Recreation, And Consumption. It Linked With Usr-related Courses, Lectures, And Project Activities, Integrating A Total Of 13 Events To Deepen The Implementation Of The Sdgs On Campus. During The Opening Ceremony Of The First Sustainability Week, Four Key Sustainability Transformation Achievements Were Showcased:

- Energy Transition | Application Of Solar Energy And Energy Storage
- Industrial Transition | Reuse Of Bamboo And Wood-based Agricultural Residues
- Lifestyle Transition | Application Of Technologies Related To Autonomous Vehicle Subsystems
- Social Transition | Lean Intelligent Manufacturing And Carbon Footprint Monitoring Systems

"2024 Taiwan Sustainable University Excellence Award" And "silver Award For Sustainability Report"

In 2024, Won 2 Gold, 1 Silver, And 5 Bronze Awards At The Asia-pacific And Taiwan Sustainable Action Awards.

The Steam Interdisciplinary Smart Automation Teaching Sharing Community Engaged Faculty, Students, And External Guests In Discussing Practical Outcomes.

Integration Of Gender Issues Into University Curriculum

Bronze Award At The Taipei Golden Eagle Microfilm Festival

Social Transformation | Lean Intelligent Manufacturing And Carbon Footprint Inventory & Monitoring System

Lifestyle Transformation | Application Of Subsystems And Related Technologies For Autonomous Vehicles

Energy Transformation | Solar Energy Storage Application

Industrial Transformation | Reuse Of Surplus Resources In Bamboo And Wood Agriculture

SDGs board game

Tour Of Green Building Of Fengtai Culture And Education Foundation

Opening Ceremony Of Perpetual Week

Usr Plan: \flowers\ Appear In The Tiger's Tail, And They Will Be Integrated Forever.

Corresponding Sdgs

Project Objectives And Highlights

Huwei Town, Yunlin County is an important flower base in China, especially featuring Euonymus grandiflorus with a high export ratio. However, facing the impact of international carbon tax policy, it is urgent to cultivate carbon management professionals. Since 112, this project has focused on the flower industry, focused on the issue of greenhouse gas emissions, and devoted itself to the cultivation of students' carbon inventory and carbon management skills, combined with the flower industry to promote the establishment of smart carbon inventory system and plan carbon reduction strategies, and closely combined education with practice. The key points of the plan are as follows:

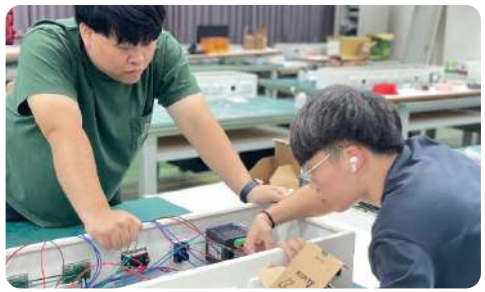
1	Industry Guidance And Carbon Management Practice	(1) Assist Balloon Flower Greenhouse To Establish A Smart Carbon Inventory System, Complete The Analysis Of Carbon Inventory And Energy Consumption Hotspots In Two Greenhouses, Make A Greenhouse Gas Inventory Statement And Pass The Verification To Ensure That It Meets International Standards. (2) Holding A Workshop On Sustainable Improvement Of Flower Agriculture, Translating Carbon Management Expertise And Attracting More Than 300 Participants.
2	Talent Cultivation	(1) Cultivate Students To Obtain International Licenses Such As Iso14064-1 And Iso 14067, Participate In Carbon Inventory And Carbon Reduction Counseling On Farms, And Accumulate Practical Experience. (2) The Team Of Teachers And Students Developed The Board Game Of \sustainable Choose The Scientist\ Climate Education, Which Was Successfully Extended To Local Primary Schools And Silver-haired People Of Old Age, And Received Positive Feedback, And Will Continue To Be Extended To Rural Schools In The Future.
3	Education Promotion	(1) Organize A Carbon Environmental Education Camp In Local Primary Schools To Transmit Carbon Management And Environmental Protection Knowledge In An Interactive Way. (2) Set Up A Butterfly Rehabilitation Area In The High-speed Rail Campus Of Hukeda, And Combine Ecological Education With Species Investigation To Create A Sustainable Education Field.
4	Hold An Ecological Education Tour, And Invite Children From Kindergartens To Participate For The First Time To Promote The Sharing Of Educational Resources.	This Project Has Achieved Remarkable Results In Carbon Management, Talent Cultivation And Education Promotion, Laying A Foundation For The Sustainable Development Of Local Industries And Communities. [example] Adaptability Courses Are Designed To Encourage Students To Choose Suitable Courses According To Their Personal Characteristics, Interests And Needs, So As To Develop Their Personal Potential.

Workshop on Sustainable Improvement of Flower Agriculture in Xiluo Town

Special Course on Responding to Climate Change

On site carbon inventory of flower greenhouse

Community Green Experience Handmade Course



Carbon Inventory Sensor Installation (On-Campus Demonstration Site)

Yixin Nursery Ecological Tour

Participate In The 2024 Taiwan Climate Action Expo To Showcase The Implementation Results Of The Plan

Yixin Nursery Ecological Tour

Lianshi Elementary School Sustainable Choice Scholar Board Game

Anqing Elementary School Carbon Environment Education Camp Team

Carbon Environment Education Camp Team (lianshi Elementary School)

Focusing On Cultivating Sustainable Talents, This Project Combines Curriculum Practicality With Local Needs, Improves Students' Professional Skills In Carbon Management And Smart Agriculture Through Teaching And Field Practice, And Translates International Carbon Tax Policies And Technical Knowledge To Farmers And Communities To Promote Local Upgrading And Sustainable Development.

1 **For Farmers**	Assist In Setting Up A Smart Carbon Inventory System, Producing Carbon Inventory Reports, And Enhancing The Industry's Ability To Respond To International Carbon Taxes; Organize Workshops To Translate International Carbon Policies Into Easy To Understand Knowledge And Enhance Agricultural Sustainability.
2 **For Schools And Students**	Integrating Curriculum With Field Practice, Students Participate In Carbon Inventory And Smart Greenhouse Construction, Gain Practical Experience, And Enhance Employment Competitiveness. The Systematic Curriculum Progresses From Shallow To Deep,Combined With Professional Certification Cultivation. Students Have Already Entered Local Governments To Participate In Policy Promotion And Deepen The Connection Between School And Local Areas.
3 **For The Community**	Promote The Board Game \sustainable Choice Scholar\ To Enhance Community Environmental Awareness And Action; Promote Local Economy And Community Cohesion Through The Reuse Of Floral Waste And Green Handicrafts.
4 **Industry And Ecology**	Promote Standardization Of Smart Agriculture And Carbon Management, And Assist The Flower Industry In Aligning With International Standards; Establish Butterfly Breeding Areas And Low-carbon Travel Routes, Strengthen Ecological Protection And Balance Educational Resources.

2024 Microfilm \blooming Tiger Tail, Sustainable Integration\

USR Program: Collaborative Learning in Agriculture, Local Creation, and Shared Prosperity for Generations - Taking the Path from Green Heart to Green Port for Value Co creation

Corresponding Sdgs

Plan Objectives and Highlights Achievements

This Plan Focuses On Agriculture, Extending The Three Major Directions Of Education, Industry And Environment.

1. In Terms Of Education, It Aims At Cultivating Agricultural Professionals With The Goal Of \local Talents In Science And Technology Agriculture\, Preparing Specialized \ agricultural Science And Technology College\ And \ bachelor's Degree Course In Circular Agriculture And Forest Utilization\, And Providing Professional And Scientific Training For Agricultural Learners To Make Up For The Lack Of Professional Manpower In Agricultural Field;
2. Second, The Industry Aims At \creating The Value Of Organic Agriculture\, Solving The Shortage Of Professional Knowledge Of Organic Agriculture And Promoting Group Cultivation, Hoping To Solve The Current Situation Of Planting Organic Agriculture But Suffering From The Lack Of Suitable Farmland For Development Or Large-scale Operation;
3. In Terms Of The Environment, The Goal Is \sustainable And Clean Agriculture\, So That Farmers Can Reduce Carbon Emissions From Farming And Increase Soil Carbon Sinks When Developing Agriculture, And At The Same Time, Give Consideration To Farmland Ecosystem Services And Create The Utilization Value Of Agricultural Surplus By-products, So As To Realize The Trend Of Reducing, Increasing, Recycling And Greening Agriculture.

The Path to Ecological and Food Transformation in 2024

Practice of flower curriculum

Facility agriculture practice

University and elementary school teachers and students unite to complete artistic landscaping.

Student internship content

Training of auditors for verification of organic agricultural products

Agricultural Machinery and Teaching of Practice Teachers

USR Hub Meta-Toy

Yunlin Synaesthesia Education Blockchain Co-creation

Corresponding Sdgs

Highlight Achievement

This project is actively linked with external resources. Yunlin second-hand toy house won the 113-year project and was selected as \Drive with Pride\ to co-shoot a series of public welfare films \Walking with Pride\. With the theme of promoting the recycling of second-hand toys and the concept of sustainable life education, driving Rainbow Tesla with the ream of Yunlin second-hand toy house toured elementary schools and community service units in Yunlin County. To promote the recycling of second-hand toys and the concept of sustainable life education as the theme, to raise people's awareness of environmental protection and resource reuse. The activities of touring elementary schools and community service units in villages and towns in Yunlin County also allowed more people to participate directly, which enhanced the popularization effect of environmental awareness. Through this activity, Yunlin second-hand toy house has attracted more social attention and participation. After the public welfare film is released, it is expected to stimulate people's interest in second-hand toys and sustainable life, and further promote social attention and action on these issues.

Toy Fair and Workshop in Kuala Lumpur, Malaysia

Leaping International. Walking with Dreams International Permanent Press Conference

Run Mode

1	Cooperate with TVI to produce programs to publicize the value of the combination of toy sustainability and culture.
2	Selected as the representative of Tesla's \Drive with Pride\ public welfare film shooting to enhance international visibility.
3	Enhance the creativity and sense of cultural connection of students in rural schools through game-based learning activities (such as traditional crafts and board game design).
4	Actively promote the design power, industrial co-creation power, and regional marketing power of toys, and extend Taiwanese fine toys to the Kuala Lumpur Fine Toy Fair and workshop in Malaysia to further expand the influence of industrial culture.

Nanzhen National Primary School Tour

Tesla's \Drive with Pride\ charity film shooting

Rainbow Tesla loads second-hand toys as gifts to children

Rainbow Tesla Tour

USR Hub

Cultural regeneration actions of new Yunlin resident women

Corresponding SDGs: 5 性別平等, 10 減少不平等

Mode of execution

Based on this project (USRHUB), we will connect the local female community of new residents, use this as a platform to cultivate and further initiative individual and small communities, and then cooperate with the local community and the new second generation of Huke Students and teachers, cultivate and integrate each other, and become a new cultural regeneration team with sustainable momentum, supplemented by the rolling adjustment of SROI's program benefit evaluation management.

In the plan, it is planned to connect courses, and this year, it focuses on the new and second generation mother culture to invest in related publicity and creation, and the reproduction of new resident culture. This year, due to the emphasis on the direct participation of new and second generation students and the interaction with teachers, the results are very distinctive.

Be familiar with SDG5 and SDG10 indicators from a more diverse perspective, and be able to correspond to the knowledge content of Southeast Asia curriculum. Taking the Introduction to Politics, Economics and Culture of Southeast Asia as an example, the course not only introduces the cultures of various countries, but also holds lectures for new residents, inviting speakers to share cultural and immigration experiences, allowing students to reflect on Taiwan's cultural issues from the perspective of foreigners. The director emphasized that understanding of the country should go beyond books, so the classroom introduced local food and clothing to promote cultural understanding through five-sense experience, and at the same time enhance the cultural confidence of new residents.

Highlight achievements

1	**Confidence and innovation:** New resident partners are not just new resident women invited to teach. Step by step, they are increasingly recognizing their outstanding talents and trying to plan independently.
2	**Shared innovation:** The annual work promotes regular cooperation between multiple groups of new residents and local partner groups, including the launch of benchmark teaching displays and the launch of multicultural products, which is the first step towards independent innovation.
3	**Fostering new students:** the plan is to link the teaching courses, and this year, the new second generation is devoted to the creation of related literature and propaganda related to the cultural input of mothers, and the results are very distinctive.

Action plan for cultural regeneration of new female residents in Yunlin.

Conditioning and creation of natural drinks in Vietnam

USR social practice &ESG local innovation forum and USR achievement exhibition market

Tuku business circle development association new residents craft market

New resident female voice theme month

Introducing local crafts into the classroom

Conditioning and creation of natural drinks in Vietnam

USR Hub

Community Good Practice Plan in Yunlin Coastal Rural Areas

Corresponding SDGs

Run Mode

The implementation process of this project in Shuijing Village is divided into three stages. First of all, start the sustainable marine activities, organize local residents to participate in the beach cleaning operation, clean up the plastic and other marine garbage on the beach, and enhance residents' awareness of environmental protection. Through regular beach cleaning activities, the community is actively involved and follow-up work is carried out on this basis.

Then, collect the marine wastes recovered from beach cleaning activities, invite master craftsman Li Yongmo to design and create handicrafts with the theme of hermit crabs, turn the wastes into valuable artworks, and promote them to local residents, encourage them to learn handicrafts, enhance their entrepreneurial ability, and form a new social and economic model.

Finally, the local agricultural waste of corn grates will be reused, and corn grates weaving workshops will be set up to teach residents weaving techniques, and this handicraft will be used as a symbol of local culture to arouse the cultural memory of the \water well marriage flower\ and further promote the cohesion and identity of the community.

Highlight Achievement

This project integrates environmental education with local crafts, drives community participation, and gradually accumulates sustainable influence. It successfully applied for the \Shuijing Village Smart Carbon Reduction and Water Saving Three-in-One Social Practice Plan\ and won the subsidy of 2.75 million yuan for the fourth phase of the budding project of university social responsibility practice, further deepening local creation and sustainable development.

1	**Enhance environmental awareness:** In May, students and community residents participated in the clean beach action of Kouhu Lake to understand the problem of marine pollution, and deepened ecological conservation education through the design of hermit crab craft material package.	3	**Promote cross-domain cooperation:** It is planned to connect academic circles, communities and craftsmen to promote the cultural regeneration of Shuijing Village, strengthen local identity, and establish a long-term cooperation mechanism of mutual benefit between academics and communities.
2	**Cultural Creation and Craft Inheritance:** On September 30th, the workshop of \Marriage Plum Blossom\ was held, led by teacher Zhang Wanyu, to transform agricultural wastes into handicrafts with cultural value and show local characteristics.	4	**Smart carbon reduction and water-saving innovation:** through USR subsidy, smart monitoring technology is introduced, combined with local sustainable technology and environmental management, to promote the co-prosperity of \ecology, life and production\, implement smart carbon reduction and water-saving actions, and bring substantial changes to the community.

Practice Plan Of Community Common Good In Yunlin Coastal Countryside: A Case Study Of Shuijing Village

Taking Pictures After Holding Diy Activities Of Hermit Crabs In Shuijing Village.

Take Pictures After Beach Cleaning Activities.

Achievements In The Implementation Of Well Marriage Flowers

Practice Of Well Marriage Flower

Shuijing Village Takes A Group Photo In Front Of The Waterwheel

Hermit Crab Diy

USR Hub

Bright University Can Enter The Countryside-yaodong Dounan Settlement Warehouse Group

Corresponding SDGs

Teachers-students Run Photography Studios To Implement Talent Cultivation

Student-led Ultrasonic Welding Technology Promotion Activities

Teachers-students Run Photography Studios To Implement Talent Cultivation

Experience Activities-student Assistance Participants

Students Participate In Settlement Game Guided Tour Recording And Shooting

Students' Participation In The Design Of Tourism Promotion Guide

Run Mode

Implement talent cultivation	The plan has the function of cultivating talents needed by the local area. Students combine their studies to accumulate professional academic energy, and through the plan, they can promote students' practical learning and cooperation mode in the practical field, and connect the accumulated professional academic and technology with the field, thus driving the local growth momentum.
The course is connected to the ground	As the role and communication bridge connecting with local and resources, the plan introduces the curriculum design with the spirit of social responsibility, moves the classroom into the field, allows teachers and students to enter the practice field, and combines interdisciplinary academic and technical professional applications to bring flip to the practice field.
Construct local studies	As an academic unit, during the implementation of the project, through academic research methods, it is also helping the localities to consolidate local knowledge and gradually build local knowledge such as culture, industry and art into a local knowledge database in an academic systematic and logical way.

Highlight Achievement

1	Students participated in the cultural investigation practice of the Museum of Life Aesthetics in Taliwu, and jointly planned the first file of Chang Min Aesthetics Exhibition.
2	Teachers and students jointly develop the education and promotion course of ultrasonic welding technology, and create a teaching module of technology entering the countryside.
3	Students use digital audio-visual shooting and post-production to make a documentary film of \Game Tour of Settlements\.
4	Students design a guide for sightseeing literature and propaganda, and build a local guide for the warehouse group on the north and south sides of Dounan Station.

Yunlin local building: Taliwu Cultural Park (Aesthetics Hall, Environmental Education Hall, 68 Film Hall, Picture Book Hall, Comic Book Hall)

USR Hub

Yunyao Excellence in Education- Double Bean Winning Model Food and Agriculture Production and Marketing History

Corresponding SDGs

Mode Of Execution

This project understands the advantages and influence of production and marketing experience on today's agricultural production and marketing, explains the importance of Taiwan's Good Agricultural Standards (TGAP), and allows students to understand the benefits this system can bring to farmers. At the same time, it also explains the concept of food and farming for all, giving students a better understanding of sustainable development and environmental coexistence.

Highlight Achievements

1	This plan combines Yunlin's local black beans and coffee with local production and sales experience, constructs the food and agricultural production and sales experience of black beans and coffee, and has a double-bean win-win model with traceable production and sales experience.
2	Through the bean-win model of black bean coffee double bean drink with experience in food and agricultural production and sales from the farm to the table, the production-end farm operators and sales-end sellers and consumers are structured to attach importance to food and agricultural hygiene safety, quality assurance and national health and well-being.

Telling Taiwan's Thoughts On Local High-quality Agriculture For Generations


Lecturer Shares Operating Experience Of Coffee Production And Marketing Classes And Production Cooperatives


Sig Co-training Activity Booth Display


Students Experience Brewing Coffee

Lecturer Talks About Jnu's Coffee Marketing Activities


Black Bean Coffee Beer Making


Discussing Food and Agricultural Safety and Nutritional Eugenics

USR Hub

Sustainable Soil Environment Building Locally Friendly Environmentally Friendly Farming Systems

Corresponding SDGs

Run Mode

This project mainly aims to establish soil environmental data, including pH, conductivity, total organic carbon content, soil elements and other data. The establishment of relevant data can not only achieve sustainable soil management with rational fertilization, but also build the basic knowledge of farmers' absorption of their own soil and plant samples.

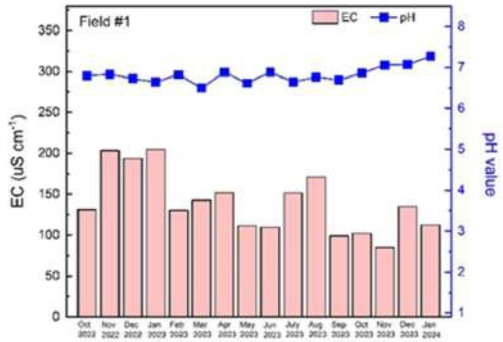
Soil collection and analysis are performed every month to gradually complete soil quality analysis. During the sampling process, the relevant soil continues to cultivate crops, so the status of crop growth and changes in soil fertility can be obtained by analyzing the data. After cultivation, the rice crop gradually grows, and the conductivity gradually decreases as the work grows. However, the pH is stable.

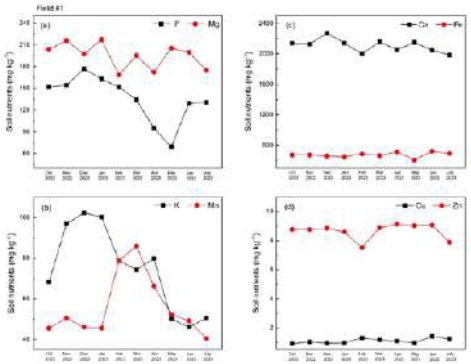
The chemical reaction between agriculture and science and technology, the second goal of the 2024 deep cultivation plan for higher education Detecting the growth of connected crops by soil

Highlight Achievement

1	From the results of this experiment, it can be known that through the long-term analysis of cultivated soil, the absorption and change of soil fertility by crops can be obtained, and the long-term monitoring can be used to predict and analyze, and the popularization of rational fertilization can be achieved.
2	Using the standard methods of soil collection and soil conductivity, pH, elemental analysis and other testing methods as teaching materials, students can actually experience the correlation between crop cultivation and soil fertility. In addition to understanding the fertilization methods provided by agricultural masters, we can also establish the cultivation methods of scientific and technological agriculture by means of instrumental analysis. Through the implementation of this plan, we can cultivate our department to become a technical counselor of reserve and understand the basic technology of soil sampling and analysis.

Soil analysis data






Pre-operation of soil analysis


Quantitative treatment


preliminary treatment


Interpretation of soil analysis data

The Sustainable Symbiosis in Huweixi River Basin

Dayunlin-Cultural Power of Digital Ark

Corresponding SDGs

Yunlin county has long faced regional problems such as population, education, agriculture, culture, etc., so it integrates USR concept into school administration, adds USR reward points, turns \service learning course\ into \social responsibility practice education course\, etc., and plans four social practice axes of \sustainable symbiosis in Huwei River basin\, hoping to form \4 Power\ through \Knowledge To Action\. They are \Dayunlin-Digital Ark Cultural Power\, \Tiger Tail Tide-Tiger Mile Sustainable Living Power\, \Tukuzhuang-Smart Granary Agricultural Power\ and \Taiwan Line 78-Friendly Ethnic Caring Power\. The specific implementation plans are as follows:

Highlight Achievement

Sustainable agronomic innovation-corn basket Q-Robot

Yunlin Guandi Children's Museum and Seed Park cooperated with the \Shanghuyun\ team to invite parents from 8 primary and secondary schools in Yunlin.Sub-families participated in the series of activities of \sustainable agricultural innovation-corn basket Q-Robot\. Activities combined with \sustainable agriculture\The three themes, namely \Art\, \Smart Technology Innovation\ and \Local Characteristic Culture\,include \Corn Basket AR Workshop\, which aims at realizing the concept of recycling agricultural wastes by technology and enhancing environmental protection. Q-Robot of Children's Museum combines basic electronic technologies such as micro:bit, PICO, ESP32, SF-Zero, etc., and displays the functions of interactive technology, such as light sensing, music playing and action response, which embodies agricultural and technological innovation. Information technology has brought a brand-new experience to Yunlin community.

Maker literacy takes root and online international exchange exhibition

This project is integrated into the sustainable development goals of the United Nations (SDGs), covering education quality, sustainable urban and rural areas, climate action, conservation of marine ecology and conservation of terrestrial ecology. Based on the invitation exhibition of the National Museum of Science and Technology, the opening ceremony of the exhibition is held around the three themes of water and soil disaster prevention, environmental sustainability and environmental conservation. Through the interactive experience and simulation operation of the exhibition teaching AIDS, two hand-made activities and scientific inquiry activities are extended at the same time to enhance people's awareness of disaster prevention and environmental sustainability.


Corn puppet making DIY


Corn basket AR


Hand-made scientific and technological works by Rachel


Children's Museum handles corn field AR activities.


Seed park tour-cicada DIY


Invite local kindergartens to visit and introduce the exhibition.


Understand environmental protection issues such as global warming and acid rain.


Enhance the awareness of marine protection through blue-printed pictures.

Corresponding SDGs

Solar energy storage application

In this project, the light box line and lighting system of Longyan Station are maintained, and the carbon fiber battery solar energy storage lighting system of the bus shelter is planned and built, which uses solar energy storage lead carbon fiber battery to provide lighting during the day, so that riders can wait safely at night and residents near the bus shelter can be illuminated at night. Through the visit of \ Carbon Fiber Battery Illuminates Tianyang\, students can get close contact with historical feelings, further understand the application of carbon fiber battery and solar energy storage, and further develop the safety and beauty of local communities.

LCF team and community residents conducted field survey in Tianyang Community, took stock of community needs and planned the expected field for 112-116 years, used solar energy to generate electricity, and introduced team technology and \lead carbon fiber battery\ into the field to respond to local needs.

Carbon reduction, environmental protection and green energy

A new life of reducing carbon from waste materials	conduct campus greenhouse gas inventory year by year, establish school baseline data, and promote campus net zero carbon emission.
AI gold reduction and reform movement	build AIOT intelligent farmland irrigation monitoring system to save water and electricity consumption of farmland, so as to achieve the effect of sustainable agricultural production and carbon reduction, establish the partnership among young farmers, technicians and schools, and create a sustainable home together.
Ecology Conservation Lohas	Investigate and measure campus tree species, and establish a database of plant ecology and carbon sequestration.
Green and clean water resources	introduce the ISO46001 water resources efficiency management system into the course, and actually go to the sewage treatment plant for environmental education courses to cultivate sustainable management talents.

Two carbon fiber batteries illuminate Tianyang, the goal of the higher education in-depth development plan in 2024

The second goal of the 2024 Higher Education Deepening Plan is to reduce carbon emissions and protect new energy

Tianyang community's expected field from 112 to 116 years.


Old field maintenance


Zhongke Huwei Park Sewage Treatment Plant Water Resources Environmental Education


Students operate drones to detect pesticide VOC

LCF team uses lead-carbon fiber batteries for solar energy storage


Construction of energy storage field in waiting booth


In-operation monitoring water and electricity consumption

Garden Tree Survey

Corresponding SDGs

Shanghuyun Production and Marketing Platform

This plan encourages students to use electromechanical information majors to participate in social practice, and enhance cross-field integration and problem solving capabilities. Through the research and development of Shanghu Cloud production and marketing platform, students deepen the application of smart agriculture and retail technologies in implementation, accumulate practical experience, and cultivate entrepreneurship and digital transformation thinking.

The Shanghu Cloud production and marketing platform is independently developed and designed by Huke teachers and students, and the system is divided into a production end and a sales end. At present, the team introduction, production, sales and other websites have been completed, and the open source code has been put on the Github platform, which can be downloaded freely. At present, there are 10 cooperative units in 7 townships and towns in Yunlin. For local governments, small farmers and stores use digital tools to optimize their business models, improve product exposure and sales efficiency, shorten the production and sales chain and reduce costs. In addition, through the data analysis and traceability functions of the platform, consumers can obtain more transparent agricultural product information and enhance market trust. At the community level, we plan to strengthen cooperation between schools and local industries to form a long-term support mechanism to promote young people's return to their hometowns and local creation. At the same time, the interaction between students and industry practitioners drives a local innovation atmosphere, enhances the acceptance of smart agriculture and retail, and achieves the goal of sustainable development.

Team

Production side

Sales end

Water brother

Yu Jian le ling

Shanghu Cloud Service Map

Gukeng Cooperation Site Inspection and Cooperation Plan Exchange

Gukeng Cooperation Site Inspection and Cooperation Plan Exchange

Dounan Taliwu Cultural Park cooperates to host arboriculture AI exhibition

Wutu learns about local ingredient harvesting

Wutu Gongxue Local Food R&D Workshop

Tiger University of Science and Technology and Wutu learn and grow

Corresponding SDGs

Aromatic medicine is healthy and friendly.

This project focuses on SDG 3 \Good Health and Well-being\, aiming at the problems of aging and high renal dialysis rate in Yunlin County, through three strategies of \correct medication, balanced nutrition, and cooperation with young people and silver\, the health literacy of the elderly population is improved, and the health risks caused by wrong medication and malnutrition are reduced.

First of all, this project promotes \Youth-Silver Companion\, through community lectures and intergenerational learning mode, to enhance the elderly's understanding of drug management, nutritional supplement and aromatherapy care, and promote healthy aging. Secondly, the strategy of \green and silver eating together\ uses local agricultural products, such as mushrooms, to develop palatable and nutritious food for the elderly, so as to improve the diet quality and nutritional intake of the elderly. In addition, softened vegetable food is developed through \high pressure processing technology\ to meet the needs of the elderly with different swallowing abilities and ensure food safety and fun.

The plan also responds to SDG 2.2 \Solving the nutritional needs of the elderly\, reducing malnutrition of the elderly through community sharing and health education, and promoting the development of local agricultural and food processing industrial chains. Finally, through the cooperation between the school and the community, combined with the resources of production and learning, the sustainable development of health care for the elderly will be promoted and the burden on the family and medical system will be reduced.

6-3 Various University Social Responsibility Activities

SDGs 1、4、8、10、14、17

SDGs breakdown target 1.3、4.1、8.6、10.2、14.2、17.17

Community volunteer service

Education priority area winter and summer camp team

Encourage young volunteers from student associations in colleges and universities to take advantage of the winter and summer vacations to organize free camp activities in primary and secondary schools in priority areas of education, thus opening a new direction to bridge the learning gap. In addition, the connotation and spirit of service learning are integrated into the camp activities to cultivate an optimistic, enterprising, active and caring outlook on life.

Camp in winter vacation in 113, By the Finance and Finance Department Society, Aircraft Engineering Department Society, Electrical Engineering Department Society, Applied Foreign Languages Department Society, Electronic Engineering Department Society, Enterprise Management Department Society, Power department of mechanical engineering Department Society, Materials Science and Engineering Department Society, Information Management Department Society, Multimedia Design Department Society, Agricultural Science and Technology Department Society, Photoelectric Engineering Department Society, Information Engineering Department Society, Mechanical Design Engineering Department Society, Industrial Management Department Society, Seven teams composed of nearly 300 students from 18 departments, including mechanical and computer-aided engineering department society, automation engineering department society and leisure and recreation department society, Nearly 400 students from 7 elementary schools in Yunlin County, including Guangfu Elementary School in Huwei Town, Shigui Elementary School in Dounan Town, Raoping Elementary School in Tongxiang Town, Minglun Elementary School in Dongshi Township, Lunlun Elementary School in Kouhu Township, Mingli Elementary School in Mailiao Township and Xinghua Elementary School, were arranged to teach professional knowledge, gender education, disaster prevention, aesthetic education, moral education, food farmers education and anti-dumping during the winter vacation.

◉Statistical Table of Camping Activities of Primary and Secondary School Students in Winter and Summer Vacations in Education Priority Areas in 2022-2024

Year	Number Of Associations	Activity Number	Number Of Volunteers	Number Of People Served	Service Hours
2022	21	12	378	328	186
2023	17	7	263	385	183
2024	18	7	264	358	182

Highlights of the flag-raising ceremony for the 2024 Winter Holiday Camp in Education Priority Area;
https://www.youtube.com/watch? v=l3k4haZ9Lt4

Photos of primary and secondary school students' summer and winter camps in priority areas of education.


Seasonal course


Dadi chuangguan


Bullying prevention course


Morning exercise teaching


Tobacco control course


Aesthetic education course

Societies practice sustainable service activities

Photos of community practice sustainable service activities


Pop Music Club/Social Services-Community Performances


Qualifications, Department of Biological Sciences/ Environmental Services-Jingtan


Department of Design, Optoelectronics/ Environmental Services-Jingtan


Fook Chi Youth Club/Environmental Services-Jingtan


Department of Electronics Society/ Rural Service-Popular Science Train


Husheng Wind Music Club/Rural Services-Driving Primary and Secondary Schools

Encourage students' associations in colleges and universities to make good use of resources, cultivate cross-disciplines and take actions in combination with sustainable development goals and local characteristics. In addition, through the process of various services (such as environmental services, social services, rural services, etc.), students' social and civic responsibilities, service skills, personal development and learning ability in real life situations are promoted, and their learning ability and critical thinking ability are reflected.

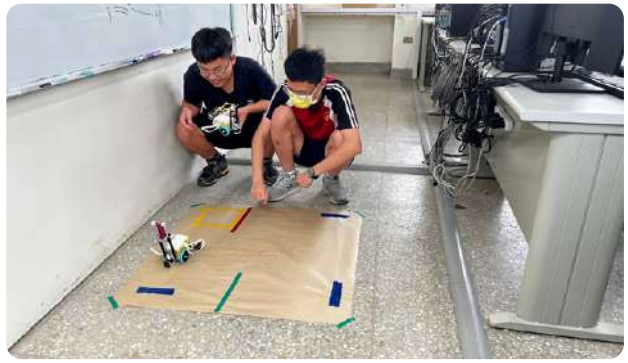
social work	Services provided for specific groups, such as nursing homes, nurseries, canteens for the elderly, social welfare institutions, dog parks, etc.
Rural service	Provide hand-in-hand services for rural primary and secondary schools, such as: primary and secondary school camps, driven primary and secondary schools, etc.
Environmental Services	Services to protect marine and land ecology, such as cleaning mountains, beaches, and campus environment, etc.

◉Number of participants in community practice and sustainable service activities in the 110-112 academic year

Academic year	Number of participants		
	Social Services	Rural services	Environmental Services
111	483	409	614
112	392	747	399
113	64	1,145	163

Industry-university cooperation-helping rural students learn and realize their dreams

The Rural Functional Dream Creation Project aims to integrate the professional and technical energy of the National Huwei University of Science and Technology and the in-depth cultivation of local feedback from the corporate Fengtai Culture and Education Foundation, introduce the university's knowledge system into rural junior high school education with relatively scarce resources, and establish a long-term local care and positive cycle learning mechanism. Professional teams led by university professors design functional course experiences covering diverse fields, connecting engineering professional technologies (aircraft, mechanical engineering, automation), life and food applications and aging experience (biotechnology), technology and artificial intelligence training (electronics, information Engineering) and other seven major courses, through the combination of knowledge theory and practice, help junior high school students explore career directions, promote students to find interests, and have a clearer direction in facing the future higher vocational department choices or career choices after leaving society. The plan also provides practical opportunities for junior college students to transform professional knowledge into easy-to-understand content during the teaching process, and strengthens their implementation and problem-solving capabilities by responding to unexpected situations in junior high school students and teaching sites. In 2024, Pianxiang Junior High School will cover 9 junior high schools, with a total of 76 courses, 270 junior high school students, and a total of 48 students participating in our school, allowing our students and junior high school students to grow together in the functional exploration course, which is also the specific practice of SDG4, 10, and 11.



LEGO self-propelled bike

Hufeng Functional Exploration Program

Aging (Pengzu) Experience

UAV operation

2024 Tiger Abundance Star Summer Camp

2024 Rural Skills Dream -Building Project (Part 1)

2024 Rural Skills Dream -Building Project (Part 2)

Appendix I GRI Content Index

Use Statement	National Huwei University of Science and Technology has reported with reference to the contents of the GRI criteria project.
GRI 1 used	GRI 1: Foundation 2021

Theme		Expose The Project	Corresponding Chapter	Page Number	Explain
Gri 2: General Disclosure 2021					
Organizing And Reporting Practice	2-1	Organization details	1-1 School History and Organizational Structure	P.12	
	2-2	Entities included in the organization's sustainability report	About this report	P.4	
	2-3	Reporting period, frequency and contact person	About this report	P.4	
	2-4	Information reorganization	About this report	P.4	
	2-5	External assurance/assurance	About this report	P.4	
Activities And Workers	2-6	Activities, value chains and other business relationships	1-1 School History and Organizational Structure	P.12	
	2-7	staff	1-1 school history and organizational structure, 3-1 talent attraction and retention	P.12、P.42	
	2-8	Non-employee worker	1-1 school history and organizational structure, 3-1 talent attraction and retention	P.12、P.42	
Govern	2-9	Governance structure and composition	1-1 School History and Organizational Structure, 2-1 School Affairs Operation	P.12、P.30	
	2-10	Nomination and selection of the highest governance unit	2-1 School Affairs Operation	P.30	
	2-11	Chairman of the highest governance unit	2-1 School Affairs Operation	P.30	
	2-12	The role of the highest governance unit in supervising impact management	1-3 sustainable development goals and strategies, 2-1 school affairs operation	P.20、P.30	
	2-13	Head of impact management	1-3 sustainable development goals and strategies, 2-1 school affairs operation	P.20、P.30	
	2-14	The role of the highest governance unit in sustainable reporting	1-3 sustainable development goals and strategies, 2-1 school affairs operation	P.20、P.30	
	2-15	conflict of interest			not applicable Our school is a national university and has no board of directors, so there is no conflict of interest.

Theme	Expose The Project		Corresponding Chapter	Page Number	Explain
Gri 2: General Disclosure 2021					
Govern	2-16	Communicate key events.	2-1 School Affairs Operation	P.30	
	2-17	Group wisdom of the highest governance unit	2-1 School Affairs Operation	P.30	
	2-18	Performance evaluation of the highest governance unit	2-1 School Affairs Operation	P.30	
	2-19	Salary policy	3-2 Compensation Policy and Welfare	P.44	
	2-20	Salary determination process	3-2 Compensation Policy and Welfare	P.44	
	2-21	Annual total salary ratio	3-2 Compensation Policy and Welfare	P.44	
Strategy, policy and practice	2-22	Statement of sustainable development strategy	The headmaster's words	P.5	
	2-23	Policy commitment	1-2 school affairs development blueprint, 1-3 sustainable development goals and strategies	P.16、P.20	
	2-24	Incorporate policy commitments	1-2 school affairs development blueprint, 1-3 sustainable development goals and strategies, 5-3 sustainable supply chain.	P.16、P.20、P.105	
	2-25	Procedures for remedying negative shocks	2-2 Risk Management and Internal Control	P.33	
	2-26	A mechanism for seeking advice and raising doubts	1-4 Stakeholder Communication, 3-2 Gender Equality and Human Rights	P.22、P.44	
	2-27	Legal compliance	ESG Management Performance, 2-4 Academic and Integrity Ethics	P.7、P.37	
	2-28	Membership of public associations	2-1 School Affairs Operation	P.30	
Deliberation of stakeholders	2-29	Stakeholder consultation policy	1-4 Communication among stakeholders	P.22	
	2-30	Group agreement	1-4 Communication among stakeholders	P.22	

Theme	Expose The Project		Corresponding Chapter	Page Number	Explain
GRI 3: Major Theme 2021					
Major theme	3-1	The process of determining major themes	1-5 Identify major themes	P.30	
	3-2	List of major topics	1-5 Identify major themes	P.30	
	3-3	Major theme management	1-5 identification of major themes, 2 university governance, 3 friendly campus, 4 school performance, 5 environmental performance, and 6 sustainable social integration.	P.30	
Theme criterion: economic aspect					
GRI 201: Economic Performance 2016	201-2	The financial impact of climate change and other risks and opportunities.	5-4 Climate Risk and Countermeasures	P.44	
	201-4	Financial assistance from the government	2-3 Financial Performance	P.44	
	203-1	Development and impact of infrastructure investment and support services	6. Sustainable social integration	P.44	
	203-2	Significant indirect economic impact	2-5 Information Security and Smart Campus	P.5	
Theme criteria: environmental aspects					
GRI 302: Energy 2016	302-1	Energy consumption within the organization	2-5 Information Security and Smart Campus, 5-1 Green Campus	P.38、P.96	
	302-4	Reduce energy consumption	2-5 Information Security and Smart Campus, 5-1 Green Campus	P.38、P.96	
GRI 303: Water and Discharge Water 2018	303-1	Interaction of shared water resources	5-1 Green Campus	P.96	
	303-2	Management of drainage-related shocks	5-1 Green Campus	P.96	
	303-3	Water withdrawal	5-1 Green Campus	P.96	
GRI 305: Emissions 2016	305-1	Direct (Category 1) Greenhouse Gas Emissions	5-4 Climate risks and response actions	P.106	
	305-2	Energy indirect (Category 2) Greenhouse gas emissions	5-4 Climate risks and response actions	P.106	
	305-3	Other indirect (category 3) greenhouse gas emissions	5-4 Climate risks and response actions	P.106	
GRI 306: Waste 2020	306-1	Waste generation Significant impacts related to waste	5-1 Green Campus	P.96	
	306-2	Management of Significant Waste-Related Impact	5-1 Green Campus	P.96	
	306-3	Waste generation	5-1 Green Campus	P.96	

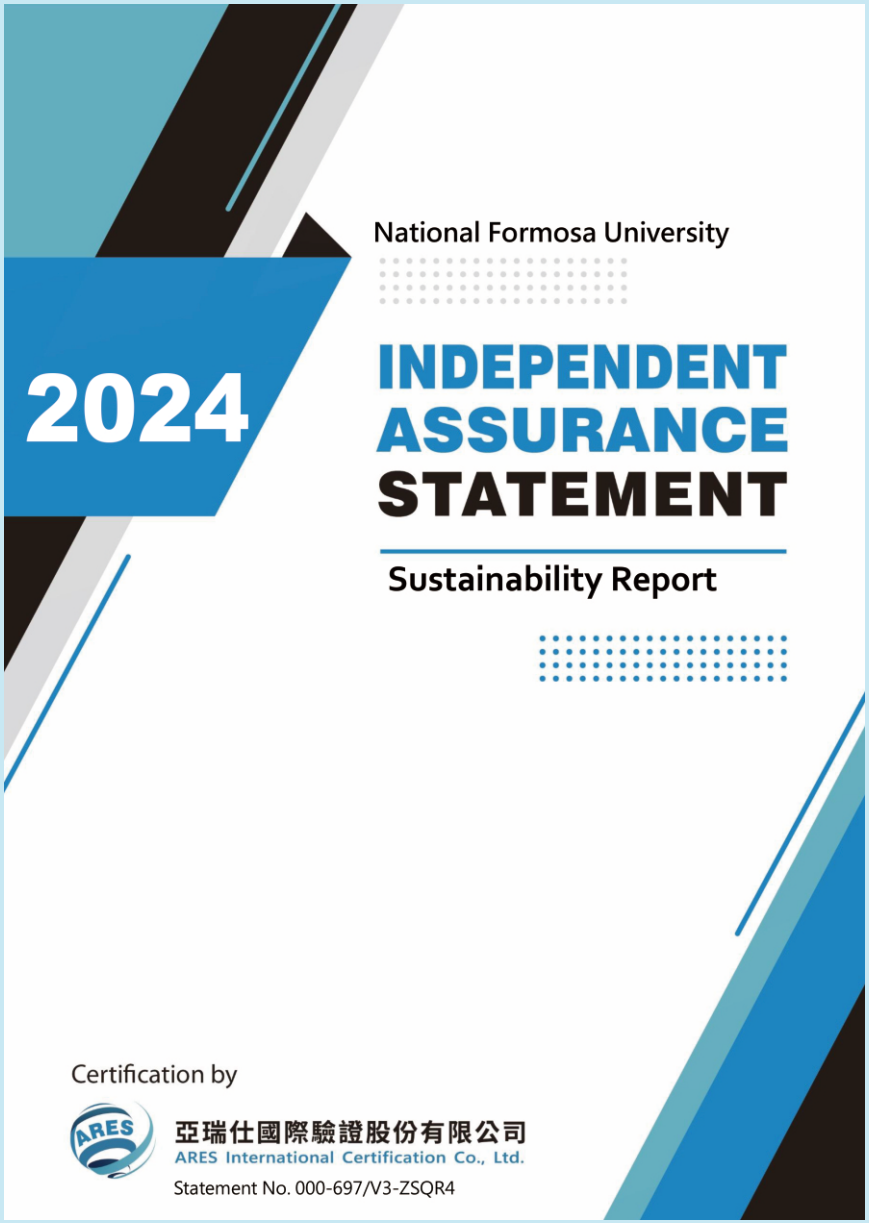
Theme	Expose The Project		Corresponding Chapter	Page Number	Explain
Thematic guidelines: Social aspects					
GRI 401: Labour Relations 2016	401-1	New Employees and Resigned Employees	3-1 Talent attraction and retention	P.42	
	401-2	Benefits provided to full-time employees (excluding temporary or part-time employees)	3-2 Compensation Policy and Benefits	P.44	
	401-3	Infant leave	3-1 Talent attraction and retention	P.42	
GRI 403: Occupational Safety and Health 2018	403-1	Occupational safety and health management system	3-5 Campus Safety and Health Activities	P.51	
	403-3	Occupational health services	3-5 Campus Safety and Health Activities	P.51	
	403-4	Worker engagement, consultation and communication related to occupational safety and health	3-5 Campus Safety and Health Activities	P.51	
	403-5	Training of workers related to occupational safety and health	3-5 Campus Safety and Health Activities	P.51	
	403-6	Worker Health Promotion	3-5 Campus Safety and Health Activities	P.51	
GRI 404 Training and Education	404-1	Average number of training hours per employee per year	3-5 Campus Safety and Health Activities	P.51	
GRI 405 Employee Diversity and Equal Opportunities	405-1	Governance unit and employee diversity	3-1 Talent attraction and retention	P.42	
GRI 406 Non-discrimination	406-1	Discrimination incidents and improvement actions taken by the organization	3-3 Gender equality and human rights	P.46	
GRI 413 Local Communities	413-2	Operating activities that have significant actual or potential negative impact on local communities	6 Social Sustainability and Inclusion	P.112	
Major themes: self-defined topics					
Custom topic		Teaching quality and learning effect	4-2 Teaching Quality, 4-5 Award-winning Glory	P.63、P.86	
		Student internship and career counseling	4-1 Student Internship and Employment, 4-4 Cooperation between Industry and University	P.60、P.82	
		environmental education	5-1 Green Campus, 5-2 Highlights of Sustainable Environment Promotion	P.96、P.104	
		Natural ecological resources	5-1 Green Campus	P.96	

Appendix II TCFD Climate-related Financial Disclosure Comparison Table

1 Risks and opportunities caused by climate change and relevant countermeasures

Item	Exposed chapter of report
1. State the school's supervision and management of climate-related risks and opportunities.	5-4 Climate Risk and Countermeasures
2. Describe how the identified climate risks and opportunities affect the school's business, strategy and finance (short-term, medium-term and long-term).	5-4 Climate Risk and Countermeasures Response to Climate Change Risks and Opportunities
3. Describe the financial impact of extreme weather events and transformation actions.	5-4 Climate Risk and Countermeasures Response to Climate Change Risks and Opportunities
4. Describe how the identification, assessment and management processes of climate risks are integrated into the overall risk management system.	5-4 Climate Risk and Countermeasures Risk and Opportunity Assessment of Climate Change
5. If scenario analysis is used to assess the resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and major financial impacts used shall be explained.	5-4 Climate Risk and Countermeasures Risk and Opportunity Assessment of Climate Change
6. If there is a transformation plan to manage climate-related risks, explain the contents of the plan and the indicators and objectives used to identify and manage physical risks and transformation risks.	5-4 Climate Risk and Countermeasures Response to Climate Change Risks and Opportunities
7. If internal carbon pricing is used as a planning tool, the basis of price setting shall be explained.	Not applicable/Our school is a teaching institution, and there is no need for internal carbon pricing as a planning at present.
8. If there is a climate-related goal, it should explain the activities covered, the scope of greenhouse gas emission, the planning period, the annual progress and other information; If carbon exchange or renewable energy certificates (RECs) are used to achieve the relevant objectives, the source and quantity of carbon reduction credits exchanged or the quantity of RECs shall be stated.	Our school has conducted greenhouse gas emission inventory, and it is also convinced that the greenhouse gas inventory will be conducted by an external impartial organization. At present, there is communication and propaganda on energy conservation and carbon reduction in our school, but it is not applicable to the status of carbon exchange or renewable energy certificates (RECs).
9. Greenhouse gas inventory and verification	In 2024, Shoupu Co., Ltd. conducted a third-party greenhouse gas verification in our school, and the verification and confirmation results met the requirements.
10. The targets used for climate-related risks and opportunities, and the performance of implementing the targets.	5-4 Response to Climate Change Climate change as monitoring and communication

Appendix III Assurance Report



亞瑞仕國際驗證股份有限公司
ARES International Certification Co., Ltd.

Independent Assurance Statement

Statement No. 000-697/V3-ZSQR4

This Independent Assurance Statement by ARES Certification Co., Ltd. on National Formosa University ESG Sustainability Report of 2024.

ARES International Certification Co., Ltd. and National Formosa University are mutually independent organizations. In addition to the assessment and verification of 2024 ESG Sustainability report, ARES International has no financial relationship with National Formosa University.

The purpose of this Independence Assurance Statement (hereinafter referred to as Statement) is only to conclude that the relevant issues within the scope of the National Formosa University's ESG Sustainability Report are guaranteed, but not for other purposes. Except for this Statement on the verified facts, for any use of other purposes, or any person who read this Statement, ARES International is not responsible or liable for any legal or other responsibility.

This Statement is based on the conclusions made from the verification of the relevant information provided ARES International by National Formosa University. Therefore, the scope of the verification is based on and confined to the content of these provided information, and ARES International shall consider that the contents of the information are complete and accurate.

All concerning and questions about the contents or the relevant issues contained in ESG Sustainability Report shall be answered by the National Formosa University.

The Scope of Assurance

The agreed scope of assurance by National Formosa University and ARES International includes the following:

- The contents of the entire ESG Sustainability Report and all operating performance of National Formosa University from January 1st, 2024 to December 31st, 2024.
- According to the type 1 of application of the AA1000 Assurance Standard (v3), the assessed nature and degree of the National Formosa University's compliance with the AA1000 Accountability Principles (2018) but excluding the verification of the reliability of the information or data disclosed in the ESG Sustainability Report.

This statement is prepared in Chinese and has an English version for reference. In the event of any discrepancy between the Chinese and English versions, the Chinese version shall prevail.

ARES INTERNATIONAL's Opinion

We summarize the contents of National Formosa University's ESG Sustainability Report and provide a fair opinion of National Formosa University's relevant operations and performance. We believe that the indices such as economic, social and environmental performance of 2024 are presented correctly. The performance indices disclosed in the report demonstrate National Formosa University's efforts to identify and meet stakeholder expectations.

Our verification activities are implemented by a team with the capacity for verifying in accordance with AA1000 Assurance Standard (v3), as well as planning and implemented this part of the activities to obtain the necessary information and data. We believe there are sufficient evidences provided by National Formosa University to show that its reporting method according to the AA1000 Assurance Standard (v3) and their self-statement are in line with the GRI standards.

Verification Method

In order to collect evidences related to conclusions, we implemented the following tasks:

- Implement the high-level management review for topics from external groups related to ESG Sustainability policy to confirm the appropriateness of the report in this statement.
- Discussions about stakeholder's engagement with the managers of National Formosa University, however, we have no direct contact with external stakeholders.
- Interviews with employees related to ESG Sustainability management, report preparation and information provision.
- Review the critical developments related to organizations.
- Review the scope and maturity of systems related to financial and non-financial reports.
- Review the supporting evidences declared in the report, and the process management described in the report and its associated AA1000 Accountability Principles (2018) on the principles of inclusivity, materiality, responsiveness and impact.

Conclusion

The detailed review results of the AA1000 Accountability Principles and the core disclosures of the Global Reporting Initiative (GRI) standard, and Task force on Climate-related Financial Disclosures (TCFD) for inclusivity, materiality, responsiveness and impact are as follows:

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ARES International Certification Co., Ltd.

- **The inclusivity**

  This report reflects that National Formosa University engages with its stakeholder through a variety of channels, such as internal and external communication mechanisms and the activities of stakeholders. This report covers topics of concern in stakeholders associated with National Formosa University, fairly reports, and discloses economic, social, and environmental information. In our professional opinions, this report covers National Formosa University's inclusivity issues.

- **The materiality**

  National Formosa University publishes the information related to ESG Sustainability to enable stakeholders to judge the organization management and performance. In our professional opinions, this report appropriately covers the material issues of National Formosa University.

- **Responsiveness**

  National Formosa University responds to requests and opinions from stakeholders. The implementation methods include customer satisfaction surveys and communication mechanisms for numerous internal and external stakeholders. In our professional opinions, this report covers National Formosa University's responsiveness topics.

- **Impact**

  National Formosa University developed and implemented processes to monitor, measure and account for how their actions affect the wider ecosystem, echoing all the aspects of this report demonstrated by their own management systems and capabilities issue content, and provide the comprehensive and balanced disclosure, such as the declaration of energy projects and carbon footprint verification. In our professional opinions, this report covers National Formosa University's impact topic.

GRI Standards

National Formosa University provides declaration of compliance with the GRI Standards. Based on the results of the review, we confirmed that the relevant ESG Sustainability indicators referred to GRI Standards in the report have been completely disclosed, partially disclosed or omitted. In our professional opinions, this declaration covers the Sustainability topics of National Formosa University

TCFD

National Formosa University provides declaration of compliance with the TCFD. Based on the results of the review, we confirmed that the relevant ESG Sustainability indicators referred to TCFD in the report have been completely disclosed, partially disclosed or omitted. In our professional opinions, this declaration covers the Sustainability topics of National Formosa University.

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Assurance Level

According to the AA1000 Assurance Standard (v3), we verify this statement as a medium level of assurance, as in the scope and method described in this statement.

Responsibility

The responsibility of this ESG Sustainability report, as stated in this statement, is owned by the person in charge of National Formosa University. The responsibility of ARES International is to provide professional opinions based on the described scope and method, and to provide an independent assurance statement for the stakeholders.

Ability and Independence

ARES International is composed of experts in a various field of management systems. The verification team is composed of members in the professional backgrounds with the qualifications of lead auditor trained in sustainable development, environmental and social management standards such as AA1000AS, AA1000AP, ISO 14001, ISO 14064-1, ISO 14067, ISO 45001 and ISO 9001. This independent assurance statement is based on the ARES International's fairtrade guidelines.

On behalf of the assurance team
07 31, 2025
ARES International Certification Co., Ltd. (ARES Certification Group)
Taiwan, Republic of China

Signed by

AA1000
Licensed Report
000-697/V3-ZSQR4

Lead Verifier

C.E.O
Calvin Chen

Appendix IV Greenhouse Gas Emission Verification Instructions

GG25-2/TW022

Verification

Greenhouse Gas Verification Statement

The inventory of GHG emissions in year 2024

國立虎尾科技大學

National Formosa University

63201 雲林縣虎尾鎮文化路64號

經本公司依據 ISO 14064-3:2019 完成查驗並符合下列標準要求

ISO 14064-1:2018

直接溫室氣體排放量4,971.6933公噸二氧化碳當量

間接溫室氣體排放量 8,413.74公噸二氧化碳當量

直接與間接溫室氣體排放量13,385.4292公噸二氧化碳當量

主導查證員

日期: 2025年06月25日

版次:1

GHG01-VS02

Sopura Co.,LTD.

本查驗意見書不可單頁使用，須與查驗範圍、目標、準則及結論頁面共同使用始具效力

第1頁 共 4 頁

GG25-2/TW022

【全校區邊界各類別溫室氣體排放量】 單位：公噸二氧化碳當量

意見書邊界			溫室氣體排放量
類別		內容說明	
直接溫室氣體排放		彙整組織邊界內由組織擁有或控制的溫室氣體。	4,971.6933
間接溫室氣體排放	輸入能源溫室氣體排放	外購電力	5,782.5018
	運輸溫室氣體排放	業務旅運、員工通勤	1,723.49
	組織使用產品溫室氣體排放	自來水、購入商品(紙張)之上游排放、上游電力、一般事業廢棄處理、變電箱絕緣氣體	907.747
	使用來自於組織產品溫室氣體排放	NA	-
	其他來源溫室氣體排放	NA	-
直接與間接溫室氣體總排放量			13,385.4292

守璞有限公司經與國立虎尾科技大學，63201雲林縣虎尾鎮文化路64號，達成雙邊協議，依據ISO 14064-3:2006之要求執行直接與間接溫室氣體排放量之查驗，溫室氣體排放量涵蓋期間自2024年01月01日至2024年12月31日，查驗意見書內容說明如下：

角色與責任

國立虎尾科技大學管理階層確保組織溫室氣體資訊系統之發展、紀錄維護及文件化程序已符合標準要求，負責評估、決定及意見書溫室氣體排放量資訊，並提供支持溫室氣體主張所需之其它資訊給守璞有限公司。

守璞有限公司秉持第三方查驗單位之準則，依據2025年04月02日之協議、ISO14064-1:2018、ISO 14064-3:2019要求，於2025年06月04日期間執行溫室氣體排放量查驗活動，並根據國立虎尾科技大學適用範圍、目標、準則及溫室氣體排放量涵蓋期間自2024年01月01日至2024年12月31日之查驗結果，提出溫室氣體查驗意見書。

保證等級

守璞有限公司依據查證準則及協議執行查驗程序，針對國立虎尾科技大學於溫室氣體主張所提**類別一、類別二之查驗證據顯示，未違反實質性差異門檻，符合主管機關認可之合理保證等級**，類別三及類別四之查驗證據顯示為有限保證等級。

本查驗意見書不可單頁使用，須與查驗範圍、目標、準則及結論頁面共同使用始具效力

第2頁 共4頁

查驗範圍

守璞有限公司依據與國立虎尾科技大學之雙邊協議，確認國立虎尾科技大學組織邊界及意見書範圍內之人為活動溫室氣體排放量與相關標準要求之符合性，根據ISO 14064-3:2019準則提出上述保證建議意見書涵蓋內容如下：

- 查驗國立虎尾科技大學之 2024 年溫室氣體排放量
- 包含校區：

校區	活動範圍地理位置
國立虎尾科技大學	63201雲林縣虎尾鎮文化路64號

- 溫室氣體排放源資訊來源為國立虎尾科技大學之盤查資訊
- 排放溫室氣體種類：二氧化碳(CO_2)、甲烷(CH_4)、氧化亞氮(N_2O)、氫氟碳化物(HFCs)、全氟碳化物(PFCs)、六氟化硫(SF_6)、三氟化氮(NF_3)
- 全球暖化潛勢(GWP)引用 IPCC 2013 第五次評估意見書之全球暖化潛勢值
- 排放係數資料庫來源:
  - 直接溫室氣體排放: 行政院環保署溫室氣體排放係數管理表 6.0.4
  - 間接溫室氣體排放:
    - 輸入能源之電力引用經濟部能源局電業法第28條規定訂定114年電力排碳係數基準公布之電力排放係數: 0.424公斤二氧化碳當量/度計算
- 二級資料庫引用環保署產品碳足跡資訊網
- 溫室氣體排放量資訊涵蓋週期：2024 年 01 月 01 日至 2024 年 12 月 31 日
- 盤查清冊版本次：第1版，2025.03.11
- 盤查意見書版本次：第1版，2025.06.04
- 查驗意見書版本次：第1版，2025.06.25
- 查驗意見書之預期使用者： 組織自行使用

查驗目標

守璞有限公司獨立客觀的取得支持溫室氣體主張揭露資訊的佐證，確保意見書資訊符合準確性、完整性、一致性及透明度之準則，其內容包含錯誤或遺漏之項目。

查驗準則

遵守下列相關標準要求執行溫室氣體主張之查驗:

- ISO 14064-1:2018 組織層級溫室氣體排放與移除之量化及意見書附指引之規範

實質性

國立虎尾科技大學定義溫室氣體主張符合性之實質性差異門檻判斷準則為5%，守璞有限公司依據此準則確認溫室氣體揭露資訊之遺漏或錯誤程度。

結論

國立虎尾科技大學依據查驗準則要求提出溫室氣體主張，揭露資訊涵蓋期間自2024年01月01日至2024年12月 31日，期間溫室氣體排放量為13,385.4292公噸二氧化碳當量。守璞有限公司採用風險評估方

法為基礎，確保並控管溫室氣體排放資訊揭露風險；規劃及執行查驗流程，包含行前評估、取樣計畫、證據之蒐集，取得查驗建議意見書需要之資訊、說明及相關佐證，確保揭露之溫室氣體排放量準確性。

守璞有限公司以客觀公正之立場，評估國立虎尾科技大學溫室氣體資訊系統、監督方法及意見書程序，溫室氣體排放量涵蓋期間自2024年01月01日至2024年12月31日，依據查驗結果保證其適用範圍、目標及準則之一致性及適切性，針對**類別一及類別二提出合理保證**，類別三、四有限保證之查證意見意見書，無保留意見之列舉。

守璞有限公司根據自身角色及責任，在此本建議意見書溫室氣體主張具實質性、正確性，以及公平性地陳述溫室氣體數據及資訊，並依據ISO 14064-1:2018製備執行溫室氣體量化、監督及意見書溫室氣體資訊，本查驗意見書將視為說明國立虎尾科技大學溫室氣體主張之查驗結果。

保密性

此意見書及附件可能包含屬於國立虎尾科技大學之機密資訊，未經國立虎尾科技大學書面同意，其他個人、團體或公司禁止自行複製或發行。

利益衝突迴避建議意見書

此意見書及附件內容完全依照主管機關之標準方法與程序等相關規定，秉持公正、誠實進行查驗作業。絕無虛偽不實，本公司與受查驗單位並無財務投資之關係，且符合主管機關對利益衝突迴避之要求。

查證團隊

上述意見書係查證團隊依據公正之查驗過程，針對國立虎尾科技大學之 2024 年溫室氣體排放量所提出之意見書。

查驗組長(VVB)：

備註：本查驗意見書遵照 守璞有限公司 溫室氣體查驗服務條款要求，意見書內容由守璞有限公司依據溫室氣體主張之查驗結果進行編製，業經客戶同意後發行，本意見書非用以解除客戶遵守組織章程、全國或省地方法令，以及任何被發佈國際指南章程之責任；客戶與守璞有限公司彼此為獨立之個體，客戶非受守璞有限公司約束，在此守璞有限公司 除客戶之外毋須代表其面對其他組織團體。