

SDG16.2.1

SDG16.2.1

題目: **Elected representation**

Have elected representation on the university's highest governing body from: students (both undergraduate and graduate), faculty, and staff (non-faculty employees)

Article 15 of Taiwan's University Act stipulates that each university shall set up a university council to deliberate and make decisions regarding significant university matters. The university council shall comprise the university president; vice-president(s); teacher representatives; heads of academic affairs units and administrative units; and representatives of research personnel, non-teaching staff, students, and other personnel.

In accordance with the University Act, the National Changhua University of Education (NCUE) has set up the university council as the school's principal management body. In addition to the heads of administrative units, all members of the university are fully represented in the university council by teacher representatives, student representatives (both undergraduates and graduates), faculty representatives, and non-faculty employee representatives. All council members have equal rights to propose and vote.

**1. NCUE's university council comprises nine personnel categories: the president, vice-president(s), the heads of first-level administrative units, the colleges' deans, department head representatives, teacher representatives, research personnel representatives, non-teaching staff representatives, and student representatives.**

**2. The teacher representatives, research personnel representatives, non-teaching staff representatives, and student representatives shall be elected in the following ways:**

2.1 There shall be 59 teacher representatives. According to Article 15 of the University Act, the teacher representatives shall comprise at least one-half of the university council. They shall be elected by the colleges and centers with full-time teachers, such as the general education center and the teacher training center.

2.2 There shall be one research personnel representative elected from among all research personnel.

2.3 There shall be two non-teaching staff representatives elected from among all permanent non-teaching staff.

2.4 There shall be 11 student representatives. According to Article 15 of the University Act, the student representatives shall comprise at least one-tenth of the university council. The student representative shall include the student union president, a Student Council representative, and a representative from the Union of Graduate Students. In addition, two graduate student representatives shall be elected, and seven representatives shall be elected from among the presidents of the department societies.

**3. The university council shall discuss and deliberate on the following matters:**

3.1 Plans and associated budgets for university development;

3.2 The charters, by-laws, and important regulations;

3.3 The establishment of, alterations to, and cessation of operations of colleges, departments, graduate institutes, and affiliated organizations;

3.4 Academic affairs, student affairs, general affairs, research, and other important internal matters;

3.5 Regulations governing teaching evaluations;

3.6 The resolutions of committees and special task groups set up by the university council; and

3.7 Proposals put forward at council meetings or by the president.

**4. The numbers of representatives of the NCUE's university council from different categories in 2020 shall be as follows:**

The president	1
Vice-presidents	2
Heads of first-level administrative units	18
Deans of colleges	7
Representatives of department heads	15
Teacher representatives	59
Representatives of research personnel	1
Representatives of non-teaching staff	2
Student representatives	11
Total	116

Attached (including supporting evidence) information: No.: 16.2.1A—University Council Representative Election Regulations of the National Changhua University of Education

## **SDG16.2.2**

**題目：Students' union:** Recognize a students' union

Article 33 of Taiwan's University Act stipulates that each university shall advise and assist its students in forming a student association by holding elections in which all the university's students have a vote and setting up other associated self-governing organizations to enhance the effectiveness of students' on-campus learning and their ability to act autonomously.

Therefore, NCUE actively assists and advises its students in establishing a student union. It has also set up the NCUE Student Union Statute to '[enable students to] participate in student affairs, promote democratic literacy, maintain campus harmony, and enhance student well-being'. The NCUE Student Union, which has been in existence for about 25 years, actively encourages students to participate in student affairs based on the democratic spirit and the goals of maintaining campus harmony and enhancing student well-being. All NCUE undergraduate students elect the president and vice-president of the student union. The university recognizes the student union as a self-governing organization of students and a self-governing student society. Its primary functions are establishing a communication bridge between the students and the university and reflecting NCUE students' opinions. Student representatives regularly attend university council meetings, administrative meetings, academic affairs meetings, student affairs meetings, and other associated major meetings. The student union also helps students use online communication platforms to share their opinions and advocate for their rights.

NCUE's measures to assist the self-governance organization of students:

- I. Visitors can directly access the Student Union's website, <https://ncuesa.ncue.edu.tw/files/11-1037-3132.php>, through the campus life column on the NCUE homepage.
- II. We encourage students to participate in the Workshop for the Inheritance and Development of Student Unions held by the Youth Development Administration, Ministry of Education, so that student leaders can develop the knowledge and skills they need. The transportation is subsidized (see Figure 4).

III. Instructors and administrative instructors guide the student union in organizing various themed activities, such as campus talk shows and seminars on house rental (see Figure 3).



Figure 1: Organization of the student union    Figure 2: Student union election    Figure 3: A seminar held by the student union

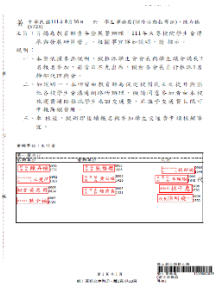


Figure 4: Official approval of the university to subsidize student leaders’ participation in a workshop

Attached (including supporting evidence) information:

- The student union’s Facebook page: <https://www.facebook.com/NCUESA/>

- 2.16.2.2A—The NCUE Student Union Statute

SDG16.2.3

題目：**Identify and engage with local stakeholders**

Have written policies and procedures to identify local stakeholders external to the university and engage with them

According to the mid- and long-term development proposal of NCUE (see **Appendix 16.2.3A**), formulated in 2016 and revised in 2017 and 2018, The eighth key point of the university's middle- and long-term development plan states the core goal of 'strengthening the openness of higher education to the public and fulfilling social responsibilities'. On the institutional level, we focus on building an open learning environment at the university by publicizing school-related information, so that the public can monitor the development of the school in various ways; regarding teaching, we offer courses and activities relating to local identities and encourage teachers and students to jointly explore regional issues and strengthen their connection with local institutions, so that the university and local communities can experience innovative cooperation, mutual benefit, and common prosperity.

1、Disclosure of information on NCUE's operations:

The "Information Disclosure" section is available on the homepage of NCUE's official website. It presents university-related information on administration, evaluation and reports, scientific research and procurement, and internal control. Local stakeholders can access the information online and provide NCUE with suggestions, guidance, and supervision based on it.

Link: <https://ncueinfo.ncue.edu.tw/>

2、Strengthening the connection between local institutions to realize joint exploration of local issues

2.1 NCUE invites local experts, scholars, and representatives of regional institutions (e.g. provincial and county governments, social welfare institutions, local enterprises, and community colleges) to clarify and communicate community issues to assist community development and foster an active and harmonious environment of social participation. Among Taiwan's universities, NCUE was a pioneer in setting up community psychological counseling and potential development centers serving people in the community. The Centre provides mental health services, including potential development, for local community residents and institutions. It also links university and community college resources to provide a sound education mechanism for local residents and strengthen interactions between NCUE and county/city governments to solve the government agencies' problems. NCUE hopes that implementing the above strategies will help NCUE and the local regions realize innovative cooperation, mutual benefits, and common prosperity. To enhance mental health professionals' practical training, the community psychological counseling center offers workshops on youth cases to train youth counseling specialists. Mental health professionals can acquire professional knowledge and skills in psychology that can improve the quality of their youth counseling.

The NCUE community counseling clinic website can be found here:

<https://human1.ncue.edu.tw/files/11-1012-12.php?Lang=zh-tw>

2.2 Caring for local industrial parks

To reflect the public nature of higher education and fulfill the university's social responsibility, NCUE's Innovation Incubation Center of the Research and Development Department actively promotes innovative businesses and assists traditional industries. Consistent with the national strategy, we build a diversified

platform with precision machinery, smart electric vehicles, and green energy industries as core technologies to form a refined incubation network and develop local competitive industries. Using the expertise and resources of the university, we help enterprises that are pursuing sustainable development goals to start up and grow. By providing long-term assistance in improving industrial technology and helping manufacturers to obtain government R&D subsidies, we cultivate industrial cooperation and expand the benefits of the guidance provided by the university in the Taichung-Changhua-Nantou Region.

In recent years, NCUE has gathered diverse resources from several of its departments, academic and research institutions in neighboring areas, the Changhua County Industrial Advancement Association, public associations, and the service centers of industrial parks and has integrated the resources of teams formed by full-time teachers with practical experience. Through the guidance of experts in various professional fields, we provide manufacturers with extensive, thorough proposals and strive to implement them. Jointly with a neighboring university (Dayeh University), we set up the “Changhua County Local Innovative Organization Alliance” and undertook cross-discipline and cross-university cooperation in order to promote R&D among small and medium-sized enterprises, as well as industry–university cooperation in innovation in the Taichung-Changhua area. Faculty members with relevant expertise are sent to cooperate in R&D with manufacturers facing a problem or otherwise in need. We also encourage enterprises to apply for government R&D subsidies (such as SBIR and CITD) to reduce their R&D costs, enhance their innovation and R&D capabilities, and increase their innovation momentum.

**Please refer to Appendix 16.2.3B for the implementation results of the school.**

### 2.3 Joining hands and linking with Changhua’s regional industries

Changhua County has mostly small- and medium-sized enterprises. The challenges faced by industrial development at this stage include the following: technical personnel shortages; process and product upgrades; process optimization and automation; cloud platform integration and relevant data analysis; process-yield monitoring technologies; wastewater treatment; environmental monitoring; energy and water conservation; and green energy implementation. These challenges have motivated the teachers in NCUE’s specialized fields to leverage resources drawn from partner universities and introduce the concepts and technologies of ‘smart machinery’ and the Internet of Things and transform traditional industries into smart manufacturing industries aligned with Productivity 4.0 to transform Changhua County into a ‘smart city’. With the Environmental Education Center serving as a platform, the professional skills and abilities of faculty members working in various fields and schools are combined to integrate the theory and practice of environmental sustainability and to guide students in designing core, professional courses and activities related to regional environmental issues, promote positive attitudes and values towards the environment, cultivate environmental education, promote photoelectric green energy applications and eco-friendly breeding technology, nurture teachers and talents for the transformation and reconstruction of communities, and improve the environment and industry so as to achieve sustainable environmental management and utilization.

The project website can be found here:



<https://zh-tw.facebook.com/NCUEUSR/>

## 2.4 Cooperation on building Changhua's green energy industry

Changhua owns a wind farm that is important at a global level. A green energy industry will definitely take root in Changhua. However, energy storage equipment is crucial to the development of green energy, and the development of smart energy, especially green energy, is one of the strong suits of NCUE's School of Engineering.

Energy company Ørsted donated a megawatt-size energy storage system to NCUE, which is the first university in the world to accept such a piece of equipment. In the cooperation project, NCUE offers the land while Ørsted provides equipment and personnel. The two parties cooperate to support the green energy development policy of the Changhua County Government. NCUE will focus on the development of smart energy during the selection of faculty members, master's and doctoral dissertations, and student projects, and will play a determining role in Taiwan's green energy industry.

Link: [https://economic.chcg.gov.tw/03bulletin/bulletin02\\_con.asp?bull\\_id=281030](https://economic.chcg.gov.tw/03bulletin/bulletin02_con.asp?bull_id=281030).

## 2.5 Building a game and sports network to empower the local elder community

Industry–official–university cooperation is conducted between NCUE and Changhua Show Chwan Memorial Hospital and Christian Hospital. The two parties have signed the “Memorandum of Cooperation in Training Professional Sports Instructors and the Service Plan” to cooperate on events and services that promote health among the elderly and the general public, public health through sports, joint academic research, academic research development in various fields, and in-depth services for local communities.

To establish a substantive cooperation mechanism between the two parties and fulfill the university's social responsibility, we run an industry–university cooperation project with Show Chwan Memorial Hospital. The theme of the project is “providing in-depth services for local communities,” the strategy is to “offer a professional sports guidance service,” and the vision is to “create an industry–official–university cooperative service business” with the aim of applying the concept of preventive medicine by promoting “regular exercise” and teaching the middle-aged and elderly to manage their health. Link:

<https://www.peopo.org/news/473706>.

## 2.6 Other relevant measures to link with local communities

2.6.1 NCUE has established an off-campus rental housing service mechanism to serve neighboring off-campus landlords and students who rent off-campus residences. The project aims to strengthen the quality of NCUE's rental housing services and effectively protect the students who rent off-campus residences.

For more information, see the following websites:

- Student's off-campus rental service project: <https://sdg.ncue.edu.tw/var/file/32/1032/img/321/254995840.pdf>
- Rental safety certification webpage: <http://student.ncue.edu.tw/files/14-1017-19011,r113-1.php?Lang=zh-tw>
- Cloud rental network: <https://house.nfu.edu.tw/announce/3571>

2.6.2 NCUE has a parking space discount system. The underground parking lot of NCUE's Jinde campus is open to the community or outsiders to rent (30 minutes of free parking is available) on an episodic or a long-term basis. Since the campus is located in Fuxing village of Changhua City, residents there who live nearby can enjoy a discounted monthly rental fee. There are quotas for the applications; the quotas, service periods, application procedures, and other relevant measures are implemented according to the Office of General Affairs. Those who hire the university's venues to hold activities can enjoy a one-time discounted fee. See details of the university parking lot management measures on the website:

<https://general2.ncue.edu.tw/ezfiles/19/1019/img/612/156554695.pdf> °

SDG16.2.4.

題目：**Participatory bodies for stakeholder engagement**

Have participatory bodies that can recognize and engage local stakeholders, including local residents, local governments, local private organizations, and local civil society representatives

Each NCUE unit provides various services in its area to local residents, local governments, local private enterprises, and local civil and social representatives.

**1. Professional counseling services provided by the community psychological counseling center.**

NCUE's Community Psychological Counseling Center held five sessions (seminars and workshops) in 2021, including the 2021 Single Session Counseling Workshop and Counseling Internship Empowerment Workshop held in the first half of 2011; the Counseling Internship Empowerment Workshop held in the second half of 2011; and the 2021 Practical Workshop on Resilience Building for High-risk Youth. Other topics covered included drug abuse, sexual assault, and domestic violence. A total of 59 people participated in the Dialogue Workshop on Criminal Psychology and Forensic Science. For more information, please refer to:

<https://human1.ncue.edu.tw/files/11-1012-14.php?Lang=zh-tw> °

**2. The Accommodation Counselling Team of the Office of Student Affairs provides students with off-campus rental services, facilitating interactions between the supply (residents) and demand (students) to improve their quality of life.**

**2.1** In the 2021 academic year, the class tutors visited the off-campus residences rented by students. There were 167 cases sent to the accommodation team for recording, and the accommodation team carried out spot checks on building safety in 55 of the cases.

**2.2** There were 60 landlords cooperating with NCUE for a total of 928 rooms in 66 buildings.

**2.3** In mid-March of 2022, NCUE sent 'Notices for Off-Campus Rental Matters' to the parents of 1,147 second-year students from 37 classes who had begun renting off-campus residences.

**2.4** On 12 May 2021, NCUE held a 'Seminar on Things to know about renting a house'. Experts and scholars explained the safety precautions related to renting to improve the students' safety awareness and legal knowledge and reduce rental disputes. (See Annex 16.2.4A).

**2.5** In February 2021, the accommodation team inspected and certified 29 rented residences. (See Annex 16.2.4B).

**2.6** NCUE established a group on the Line communication app that provides instant communication between students and landlords.

**2.7** NCUE helped settle two off-campus rental disputes involving students in the 2021 academic year.

**3. The College of Extension Education, NCUE, provides continuous learning courses, and the Language Centre offers Chinese language courses.**

**3.1** The College offers various language courses enabling community residents to develop their foreign language skills. In 2021, the College offered 21 language classes, including English, Japanese, Korean, French, Vietnamese, and German, teaching a total of 2,592 class hours; 722 students had completed the courses.

**3.2** NCUE established the Changhua County Senior Citizens' University to encourage county residents over the age of 55 to return to school. The program held two sessions of 16 weeks each in 2021, and 383 students in 21 classes completed the courses.

**3.3** To meet the Ministry of Education's guidelines for secondary school teachers' continuing education, the College provides enhancement classes and

courses for teachers to develop their specialities and improve their professional capabilities. In 2021, NCUE offered 67 courses for a total of 3,168 training hours, and 1,420 people participated.

**3.4** To help people continue their education and improve their professional skills, NCUE provides vocational training courses for community residents and local industry employees. In 2021 a total of 85 classes completed more than 3,606 training hours, helping 2,548 trainees improve their knowledge and abilities.

**3.5** NCUE also offers various continuing education courses on business operations, information technology, business management, marketing, and handicrafts enabling community residents to pursue self-growth in their areas of interest. In 2021 1,401 people attended 56 classes such classes.

#### **4. NCUE provides services to the local SMEs**

**4.1** In the 2021 academic year, NCUE's Innovation Incubation Centre of the Research and Development Department implemented the "Science and Technology Care Project to Support Small and Medium-sized Enterprises" and the "Industry Guidance for Innovation in Industrial Parks Project" to guide local small and medium-sized enterprises in industrial upgrading and help them obtain subsidies from the government. The results of the guidance are as follows:

##### **(I) Science and Technology Care Project to Support Small and Medium-sized Enterprises**

- ① Participating enterprises/experts and scholars/students: 15/15/26**
- ② New product/technology development: 3 cases**
- ③ Technical and talent training courses: 2 sessions**
- ④ Applications for government subsidies: 4 applications/2 approved, with a total subsidy of 1.048 million NTD**
- ⑤ Patent application and utilization: 3 cases**
- ⑥ National competition: 5 cases**

##### **(II) Industry Guidance for Innovation in Industrial Parks Project**

- ① Participating enterprises/experts and scholars: 80/20**
- ② Technical guidance: 11 cases**
- ③ Technical and talent training courses: 4 sessions**
- ④ Applications for government subsidies: 2 applications, applying for a total subsidy of 4.65 million NTD**
- ⑤ Productions based on student projects: 6 cases**
- ⑥ Student internships 28 people**



**Figure 1: Guidance case – Nuvo Enterprise Co., Ltd.**

Please refer to appendix: 16.2.3B



**Figure 2: Guidance case – Hsi Jen Enterprise Co., Ltd.**

**4.2 Using their expertise, NCUE faculty members from various Colleges help local enterprises with various R&D and technology applications. This work includes thematic studies, materials exchange, tests and inspections, technical services, consulting, patent applications, technology transfer, innovation incubation, and various talent cultivation activities. In 2021, the school ran a total of 59 industry–university projects with enterprises and other juridical persons, and the total amount involved was 25,520,922 NTD.**

**For the results of the projects, please refer to:**

**<https://rnd.ncue.edu.tw/files/90-1002-23.php>**

**4.3 NCUE promotes the “2021 Mentorship Project-based Practice Pilot Program” to establish unique industry–university interactive projects and cross-discipline/cross-institution collaborative relationships; promote integration between teachers, students, and industries/enterprises in the teaching and learning processes; narrow the gap between theory and application; and establish teamwork relationships via cross-discipline and cross-institution integration. The subsidized projects are categorized as follows: “Industry–university cooperation,” in which full-time teachers guide students in project-based practices and cooperate with an industry or enterprise on a specific task; “Cross-discipline integration,” in which teachers guide students from at least two departments in cross-discipline project-based practices; and “Competition preparation,” in which teachers guide students in project-based practices as they participate in internal and external competitions. In 2021, 95 projects in which 278 students from 13 departments participated were subsidized. The total amount involved was 725,789 NTD. In the 2021 Practical Competition of Smart Campus System, our students won a High Distinction Award, an Excellence Award, and four Honorable Mention Awards. Please refer to: <https://sites.google.com/gm.ncue.edu.tw/mentorship>.**

## SDG16.2.5

### 題目: **University principles regarding corruption and bribery**

Publish the university's principles and commitments regarding organized crime, corruption, and bribery

1. The personnel office of NCUE has allocated officers to handle ethics issues, including matters relating to property-declaration by public servants, and irregularly return to the Ministry of Education for training. (See Annex 16.2.5A and 16.2.5B for details)
2. All NCUE faculty members and staff shall abide by the *Criminal Code of the Republic of China*, *Anti-Corruption Act*, *Government Procurement Act*, *Act on Property-Declaration by Public Servants*, *Act on Recusal of Public Servants Due to Conflicts of Interest*, and *Integrity and Ethics Direction for Public Servants*. To implement the policy of corruption-free, efficient politics and publicly support its administrative decrees, NCUE establish an “Integrity Promotion Zone” on the school website, which is divided into four major categories, including “Small Purchase Promotion, Conflict Avoidance Promotion, Property Declaration Promotion, and Integrity and Ethics Promotion”, and publicity matters such as government regulations, QA and practical cases, etc. (website: <https://personnel.ncue.edu.tw/files/11-1006-3228.php?Lang=zh-tw>). The university actively guides the obligors to make complete and truthful declarations, implements the annual property declaration by public servants, and ensures the integrity of public servants (see Annex 16.2.5C) to achieve a corruption-free, open, efficient, and high-quality school. The university provides public access channels for monitoring the government's administration through information disclosures and administrative transparency to ensure the integrity of the public servants and improve administrative operations.
3. To effectively manage and use the R&D results of faculty members, staff, and researchers, NCUE has formulated such regulations as the *Management Measures on the R&D Results and Technology Transfer of the National Changhua University of Education* and the *Guidelines for Avoidance of Conflicts of Interest and Information Disclosure Concerning the Use of the R&D Results of the National Changhua University of Education*. Regulating the management and use of NCUE personnel's R&D results enhances the university's innovation atmosphere and increases its income. (See Annexes 16.2.5C and 16.2.5D for details.)

Annex 16.2.5A 2022 Training for staff responsible for ethics management in subordinate agencies and schools of the Ministry of Education

Annex 16.2.5B 2022 Training for staff responsible for property declaration in subordinate agencies and schools of the Ministry of Education

Annex 16.2.5C *Management Measures on the R&D Results and Technology Transfer of the NCUE*

Annex 16.2.5D *Guidelines for Avoidance of Conflicts of Interest and Information Disclosure Concerning the Use of the R&D Results of the NCUE*

題目: **Academic freedom policy**

Have a policy on supporting academic freedom (freedom to choose areas of research and to speak and teach publicly about their research area)

1. According to Article 11 of *The Constitution of The Republic of China*( <https://law.moj.gov.tw/LawClass/LawSingle.aspx?pcode=A0000001&flno=11>), the people have the freedom of speech, lectures, writings, and publications; Article 1 of the *University Act* ( <https://law.moj.gov.tw/LawClass/LawAll.aspx?pcode=h0030001>)stipulates that universities shall be guaranteed academic freedom and enjoy autonomy within the scope of the laws and regulations. NCUE administration abides by the law. All faculty members are free to choose their research fields and publicly discuss and teach the knowledge in their fields. The regulations guarantee academic freedom. In addition to supporting academic freedom, the university encourages and rewards teachers for publishing diverse research results.
2. NCUE encourages all faculty members (including new and senior members) to research and publish the results in their areas of expertise or interest. In 2021, 113 SCI papers and 41 SSCI papers were published. Faculty members, both new and senior, are rewarded according to their research results. Faculty members who have published papers in domestic or foreign journals patented their inventions and published research-oriented academic books that have been reviewed receive different reward amounts. In 2021, a total of 89 people were awarded, with the reward amount totaling 1.309 million; In addition, trophies such as the Top Research Award, Exquisite Research Award, Best Newcomer award, and Research Newcomer Model Award are prepared for the scholars who have distinguished achievements. Link:
  - (1) Incentive Program for Faculty Members' Research Achievements (revised in 2021):  
<https://rnd.ncue.edu.tw/ezfiles/2/1002/img/707/15250746.pdf>
  - (2) NCUE faculty members awarded by the Incentive Program for Faculty Members' Research Achievements in 2021:  
<https://rnd.ncue.edu.tw/ezfiles/2/1002/img/890/214464361.pdf>
3. NCUE encourages all faculty members (including new and senior members) to cooperate with the public and private sectors on research projects in their areas of expertise or interest, so as to align with these industries and train their teams to carry out cross-discipline cooperation. NCUE's departments and faculty members strive to implement projects for external parties. In 2021, they implemented the following: 145 projects entrusted by the Ministry of Science and Technology totaling 138,045,741 NTD; 189 projects not entrusted by the Ministry of Science and Technology totaling 340,850,141 NTD; and 59 industry–university cooperation projects totaling 25,520,922 NTD. Also, faculty members displaying excellence in their research results and projects may be rewarded with positions such as Distinguished Professor, Outstanding Faculty Member, or Special Outstanding Talent or receive awards such as the industry–university cooperation merit award; this encourages faculty members to research and promote cooperation and development with industries regarding their own initiatives.

- (1) For the results of NCUE's 2021 projects, please refer to: <https://rnd.ncue.edu.tw/files/90-1002-23.php>.
  - (2) NCUE's measures for appointing Distinguished Professors (revised in 2021): <https://rnd.ncue.edu.tw/ezfiles/2/1002/img/707/15250746.pdf>
  - (3) NCUE faculty members appointed as Distinguished Professor over the years: <https://rnd.ncue.edu.tw/ezfiles/2/1002/img/890/961757950.pdf>
  - (4) NCUE's measures for naming Outstanding Faculty Members (revised in 2021 and 2022):  
<https://rnd.ncue.edu.tw/ezfiles/2/1002/img/657/136792865.pdf>
  - (5) NCUE faculty members named as Outstanding Faculty Members in 2022: <https://rnd.ncue.edu.tw/ezfiles/2/1002/img/657/21467488.pdf>
  - (6) NCUE's measures for awarding Special Outstanding Talents (revised in 2021 and 2022):  
<https://rnd.ncue.edu.tw/ezfiles/2/1002/img/707/211181089.pdf>
  - (7) NCUE faculty members named as Special Outstanding Talents in 2022: <https://rnd.ncue.edu.tw/ezfiles/2/1002/img/890/211475906.pdf>
  - (8) NCUE's Industry–University Cooperation Merit Awards (revised in 2021): <https://rnd.ncue.edu.tw/ezfiles/2/1002/img/707/816392511.pdf>
  - (9) NCUE faculty members awarded the Industry–University Cooperation Merit Award in 2021:  
<https://rnd.ncue.edu.tw/ezfiles/2/1002/img/890/234872610.pdf>
4. Also, to support and encourage new faculty members in conducting research and implementing research projects entrusted by the Ministry of Science and Technology, NCUE formulated the *National Changhua University of Education Fundamentals for Awarding New Faculty Members and Researchers to Implement Projects Entrusted by the Ministry of Science and Technology* in 2021 and revised the *National Changhua University of Education Measures for Subsidizing New Faculty Members on Thematic Studies* in 2021. In 2021, 13 new faculty members implemented research projects entrusted by the Ministry of Science and Technology, and the total awarded amount was 261,445 NTD. Twelve new faculty members were subsidized via NCUE's Program for Subsidizing New Faculty Members Conducting Thematic Studies, and the total amount involved was 1.52157 million NTD.
- (1) NCUE's Fundamentals for Awarding New Faculty Members and Researchers to Implement Projects Entrusted by the Ministry of Science and Technology: <https://rnd.ncue.edu.tw/ezfiles/2/1002/img/707/119522290.pdf>.
  - (2) NCUE Faculty members awarded for implementing projects entrusted by the Ministry of Science and Technology:  
<https://rnd.ncue.edu.tw/ezfiles/2/1002/img/890/859731503.pdf>.
  - (3) NCUE's Program For Subsidizing New Faculty Members Conducting Thematic Studies (revised in 2021):  
<https://rnd.ncue.edu.tw/ezfiles/2/1002/img/657/148957129.pdf>.
  - (4) New NCUE faculty members subsidized via the Program for Subsidizing New Faculty Members Conducting Thematic Studies in 2021:  
<http://rnd.ncue.edu.tw/ezfiles/2/1002/img/657/117927167.ods>.



## SDG16.2.7

題目: Publish financial data

Publish university financial data

NCUE regularly announces its important financial data:

1. The university prepares annual budgets according to its development priorities and administration goals, considering the school's actual needs and the capacity of the university fund. It submits the budgets to the Ministry of Education and the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan for review. The budgets approved by the Legislative Yuan become statutory budgets and are announced on the university's website.
2. At the end of each year, NCUE organizes and settles its accounts based on what has been implemented before producing the final accounts for review by the Ministry of Education and the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan. The final accounts are announced on the university's website and published after review by the National Audit Office.
3. As required by regulations, NCUE publishes its monthly reports, income and expenditure analyses, and changes in available funds in the information disclosure area of its website. The home page of the NCUE Accounting Office also has a financial information disclosure area to provide information on the university fund's annual budgets, revenue, expenditures, and final accounting.
4. See the details of the attached (including supporting evidence) information on the websites below:
  - The information disclosure page of NCUE: <https://ncueinfo.ncue.edu.tw/02%E8%B2%A1%E5%8B%99%E8%B3%87%E8%A8%8A%E5%88%86%E6%9E%90>
  - The financial information disclosure page of NCUE Accounting Office: <http://accounting.ncue.edu.tw/bin/home.php>

## SDG16.3.1

### 題目: **Provide expert advice to government**

**Provide expert advice to local, regional, and national governments (for example, through policy guidance, participation in committees, and the provision of evidence)**

NCUE comprises seven colleges: Arts, Science, Engineering, Education, Management, Technology and Vocational Education, and Social Sciences and Physical Education. NCUE is a national university with leading academic achievements and industry–university cooperation performance in the Taichung-Changhua-Nantou Region. Its faculty’s professional achievements from all the colleges have been recognized by local government agencies. The faculty members serve as advisory or review members of government committees and consult with various government agencies to provide specific suggestions for formulating policies. Some of the examples follow:

In 2021, eight faculty members were invited to serve as supervisors or reviewers of government departments in nine occasions. In four of the occasions, they assisted the central government, while in five occasions, they assisted local governments. The details are as follows:

#### 1、Serving as supervisors or reviewers of the central government:

- 1.1 Pei-Hsuan Wei, assistant professor at the Department of Public Affairs and Civic Education, serves as a committee member of the Government Information Disclosure Advisory Group of the Executive Yuan’s Mainland Affairs Council, and is responsible for reviewing and advising on the government’s information disclosure practices.



姓名	單位	身分別	性別	任期	聯絡方式
林宗男	國立台灣大學電機工程學系	民間代表		2021-09-15 ~ 2022-09-14	
孫明德	台灣經濟研究院景氣預測中心	民間代表		2021-09-15 ~ 2022-09-14	
魏地軒	仰光大公事務與公民教育學系	民間代表		2021-09-15 ~ 2022-09-14	
黃維中	工業技術研究院智慧資訊科技中心	民間代表		2021-09-15 ~ 2022-09-14	
楊子雲	中央研究院經濟研究所	民間代表		2021-09-15 ~ 2022-09-14	

Figure 1: Prof. Pei-Hsuan Wei serves as a committee member of the Government Information Disclosure Advisory Group for the Mainland Affairs Council

- 1.2 Ming-Hung Wang, Professor at the Graduate Institute of Rehabilitation Counseling, serves as a committee member of the Convention on the Rights of Persons with Disabilities for the Executive Yuan, and is responsible for advising government departments on policies and measures for implementing the United Nations Convention on the Rights of Persons with Disabilities, as well as helping to review complaints about rights violations.

衛生福利部 開會通知單

50007  
彰化縣彰化市進德路1號

受文者：王委員敏行

發文日期：中華民國109年2月27日  
發文字號：[REDACTED]  
類別：普通件  
密等及解密條件或保密期限：  
附件：會議議程及會議資料

機關地址：11558臺北市南港區忠孝東路六段488號  
傳真：[REDACTED]  
承辦人及電話：[REDACTED]  
電子郵件信箱：[REDACTED]

開會事由：身心障礙者權利公約(CRPD)第二次國家報告第一輪審查會議（共7場）  
開會時間：109年3月3日（星期二）上午9時30分  
開會地點：本部301會議室（臺北市南港區忠孝東路六段488號3樓）  
主持人：簡署長慧娟  
聯絡人及電話：陳瑾華（02-26531708）

出席者：王委員國羽、張委員蔭莉、謝委員榮堂、李委員秉宏、王委員敏行、張委員光華、謝委員宏昌、滕委員西華、成委員亮、王委員增慧、陳委員誠亮、雲委員鈞廷、陳委員俐靜、馬委員海霞、吳委員鴻來

Figure 2: Meeting notice sent to Prof. Ming-Hung Wang, a committee member of the Executive Yuan

- 1.3 Chin-Yen Chen, Professor at the Department of Guidance and Counseling, serves as a reviewer for the Gender Equality Committee of the Executive Yuan, and is responsible for reviewing municipal and county (city) governments' performance on gender equality projects for the Executive Yuan, as well as providing advice regarding the gender equality projects of local governments.

109 年行政院辦理直轄市與縣（市）政府推動性別平等業務  
輔導獎勵計畫評審委員建議事項  
臺北市政府

(一)何振宇委員(一、基本項目；四、提升女性公共參與)：

整體意見

- 1、性平辦首頁及附屬網頁，部分更新時間陳舊，閱讀資訊亦呈現可讀性較低之現象，建議進行網頁、FB 粉絲頁、跨局處業務綜整之工作，並進行使用者分享分類議題之設計，以利使用。
- 2、政府出資超過 50% 之企業(北捷)，董監事之任一性別比例仍未達 1/3，殊為可惜。建議列入下屆任期董監事人員聘任及章程修訂之參考。
- 3、108-110 之因應少子化及高齡化政策—以性別觀點建構，值得肯定，六大主軸目標也算清楚，建議在年度結束後，仍逐年依原規劃之六大主軸做綜整及檢討，並滾動回應到次年政策。
- 4、建議建立男性友善參與家務分工、育兒工作之性平環境。例如制定鼓勵計畫使男性工作人員更樂於、更積極參與家庭家務分工及育兒工作，使台北市政府成為各縣市之表率。

(二)陳金燕委員(二、性別主流化實施情形)：

整體意見

- 1、該市在「性別主流化」六項工具之性別統計、性別分析與性別影響評估檢視 (GIA) 的涵蓋率均佳。

Figure 3: Suggestions provided by Prof. Chin-Yen Chen on the work of the Taipei City Government, as a reviewer for the Gender Equality Committee of the Executive Yuan

- 1.4 Miao-Yu Tsai, Professor at the Graduate Institute of Statistics and Information Science, serves as a reviewer for the Statistics Sector of the Department of Natural Sciences, Ministry of Science and Technology, and is responsible for reviewing applications sent to the Statistics Sector of the Ministry of Science and Technology.

## 科技部 開會通知單

(受文者郵遞區號)  
(受文機關)  
(受文者地址)

受文者：如出席者

發文日期：108 年 12 月 26 日  
發文字號：科部自字第 108122602 號  
類別：普通件  
密等及解密條件或保密期限：普通  
附件：

開會事由：自然司統計學門 109 年第 1 次複審會議

開會時間：109 年 1 月 20 日(星期一)下午 1 時 30 分至下午 3 時 30 分

開會地點：台北市和平東路二段 106 號 [科技大樓 2 樓第 7 會議室](#)

主持人：程毅豪召集人

聯絡人及電話：陳美慈小姐 (02)27377811

出席者：交通大學統計所王秀瑛委員、逢甲大學統計系王婉倫委員、  
成功大學統計學系陳瑞彬委員、中央研究院統計所楊欣洲委  
員、清華大學統計所銀慶剛委員、[彰化師範大學統計資訊研  
究所蘇秋玉委員](#)

列席者：本部自然司陳美慈副研究員、王心順小姐

Figure 4: Meeting notice sent to Prof. Miao-Yu Tsai, a reviewer of the Ministry of Science and Technology

## 2、Serving as supervisors or reviewers of local governments:

2.1 Wen-Kung Tseng, Professor at the Graduate Institute of Vehicle Technology, serves as a member of Nantou County's Traffic Accident Investigation Committee, and is responsible for evaluating accident reports and clarifying liabilities.



國立彰化師範大學  
車輛科技研究所

服務所簡介 | 成員 | 公告事項 | 教職員工 | 學士專區 | 招生入學 | 評鑑專區 | 相關網站

教職員

姓名：曾文功  
職稱：專任 教授兼所長  
研究室：車輛所  
電話：04-7232105 # 7058  
電子郵件：andy007@cc.ncue.edu.tw  
個人網頁：  
學歷：美國南安普敦大學機械處理與控制博士 2001年5月畢業  
美國南安普敦大學車輛碩士 1997年11月畢業  
台北科技大學二技機械系  
台北工專機械科汽車組  
台中高工汽車科  
經歷：專任副教授於國立彰化師範大學車輛科技研究所2007年8月 至今  
專任副教授於南開技術學院電機系2007年1月 至2007年7月  
專任助理教授於南開技術學院電機系2001年3月 至2006年12月  
兼任助理教授於國立台北科技大學車輛系2001年9月 至2005年1月  
南投縣行車事故鑑定委員會鑑定委員2004年6月 至今  
Reviewer of Journal of Sound and Vibration. (美國)  
飛機工程師負責數位控制系統設計用於主動式飛機座艙消音設備 BA Boeing 747 飛機於 Ultra Electronics Company. (美國)  
飛機工程師負責數位控制系統設計用於裝甲車主動式頭盔消音設備於 Lectret Electronics Company. (美國)  
汽車修護工程師於台中永運BMW汽車廠(台灣)  
汽車修護技師於陸軍野戰部隊202師化學兵連 (台灣)  
汽車修護技師 (台灣)  
專長：車輛工程、車輛控制系統、適合動力系統、控制原理、主動式噪音控制、馬達控制。

Figure 5: Website of the Graduate Institute of Vehicle Technology acknowledging that Prof. Wen-Kung Tseng has served on the Traffic Accident Investigation Committee since 2004.

2.2 Tsung-Chain Huang, Professor at the Department of Guidance and Counseling, serves as the supervisor of the Taichung City Empowerment Group for Secondary School Counselors, assisting school counselors working in secondary schools in Taichung City by providing case supervision and empowerment training in expressive art therapy cases.



Figure 6: NCUE's Prof. Tsung-Chain Huang assists Taichung Secondary School counselors in expressive art therapy empowerment study

2.3 Tsung-Chain Huang, Professor at the Department of Guidance and Counseling, serves as the group supervisor at the Student Counseling Center of the Taichung City Government Education Bureau, assisting professional counselors by providing case supervision and empowerment training in sandplay therapy.



Figure 7: NCUE's Prof. Tsung-Chain Huang assists in training held at the Student Counseling Center of the Taichung City Government Education Bureau

2.4 Mei-chun Lydia Wen, Professor at the Graduate Institute of Science Education, serves as counseling professor for the city-based Course Development Program in Information Education of the Taichung City Government, and is responsible for assisting in the development of city-based information education courses for elementary and junior high schools across all school districts in Taichung City. This work includes professional teacher development on information education courses and course materials.



Figure 8: NCUE's Prof. Mei-chun Lydia Wen assists Taichung City Government in the training of information education teachers

2.5 Xu-Yao Tseng, Professor at the Department of Mathematics, serves as a committee member responsible for reviewing the quality of Taichung junior high schools and helping the Taichung City Government select outstanding junior high school mathematics teachers.

SDG16.3.2

題目: **Policymaker and lawmaker outreach and education**

**Year: 2019 or 2020**

Provide outreach, general education, upskilling, and capacity-building to policymakers and lawmakers on relevant topics, including economics, law, technology, migration and displacement, and climate change



NCUE faculty members actively assist policymakers and lawmakers by providing outreach activities and courses relating to sustainable development (SDG) concepts such as economics, law, technology, migration, displacement, and climate change. The NCUE faculty members in relevant professional fields serve as advisory members to government agency' committees and help implement the agencies' plans. They ensure that the policymakers and lawmakers recognise and understand the sustainable development concepts and guide them in finding feasible strategies and specific actions towards achieving the United Nations' 2030 SDGs. Some examples follow:

1. In 2021, four NCUE faculty members implemented eight projects entrusted by government agencies, helping policymakers and lawmakers to improve their awareness of relevant sustainable development goals:

- 1.1 Two faculty members assisted in two "economic" projects:

- 1.1.1 Yu-Chung Wei, Professor at the Graduate Institute of Statistics and Information Science, implemented the "Statistical Analysis of the Composition of Oil and Gas in Taiwan" project of CPC Corporation. Using statistics and machine learning analysis, the project explored the potential oil and gas reserves in the oil and gas mining areas in Taiwan in order to improve Taiwan's energy economy.
- 1.1.2 Chiu-Luan Hsieh, Professor at the Department of Biology implemented the "Using Ai Intelligent Neural Network and Bionic Transformation Mechanism to Establish an Industrial Production Process of High Economic Crocetin" project of the Ministry of Science and Technology, introducing environmentally friendly microbial engineering methods to conduct bionic transformation on crocetin that had been mass-produced in cell factories in order to mass-produce CCN raw materials.

Link:<https://www.grb.gov.tw/search/planDetail?id=13866514>

- 1.2 A faculty member assisted in a "technological" project:

Chin-Ping Hu, Professor at the Department of Geography, implemented the "Beyond the Coalescence: Exploring the Multi-Messenger Astrophysics with Advanced Time-Frequency Analysis Techniques" project of the Ministry of Science and Technology to identify the multi-messenger characteristics of celestial bodies in electromagnetic and gravitational waves. This research achieved its goal on four levels: (1) Establishing advanced mathematical algorithms, (2) Observing continuous gravitational wave sources with NinjaSat; (3) Performing pilot studies of disk instability in X-ray band, and (4) modeling the gravitational waveforms of accretion disks and supernovae.

- 1.3 A faculty member assisted in five "climate change" projects:

- 1.3.1 Chung-Chi Lin, Professor at the Department of Biology, implemented the "2022 Shoushan National Natural Park Plan of Survey, Monitoring and Control against Yellow Crazy Ants" project of the National Natural Park Management Office. This year, the project focuses on dense areas with a high density of yellow crazy ant colonies in the windbreaks surrounding the seawall of Mountain Qi Hou, and plans to control the number of



ants with liquid baits and insect growth regulator baits. Insect traps and baits are used for investigation and monitoring to evaluate the control effect. The distribution of yellow crazy ants is also investigated in the habitats of terrestrial crabs in Mount Banping and the Northern Shoushan military control zone.



Figure 5: Areas with a high density of yellow crazy ant colonies in Shoushan National Natural Park

1.3.2 Chung-Chi Lin, Professor at the Department of Biology, implemented the “2022 Kaohsiung City Evaluation Plan for the Survey and Control Strategy of Flying Ant Harm” project of the Kaohsiung City Government to reduce the disturbance caused by dolichoderine ants and prevent their population from continuing to expand and spread. The project also monitors and investigates areas experiencing serious harm from Technomyrmex ants and identifies the reasons for the harm. Control test areas are also set up to develop control strategies, control the density of dolichoderine ant colonies, and reduce the disturbance flying ants cause to the public.

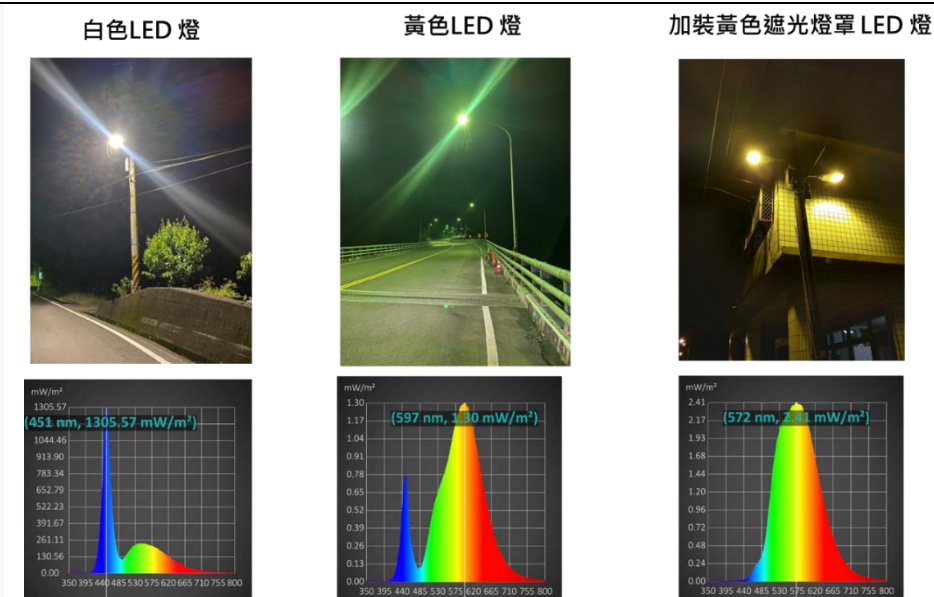


Figure 6: Yellow lampshades are added to LED street lights to prevent harm from flying ants

1.3.3 Chung-Chi Lin, Professor at the Department of Biology, implemented the Ministry of Science and Technology’s project “Discussion on and Solutions to the Problem of Pest Ant Damage Caused by the Impact of Climate Change on the Lowland Ecology and the Change of the Lowland Community,” which helped establish a model for the spread of dolichoderine ant colonies and invent microbial control repellents against dolichoderine ants.

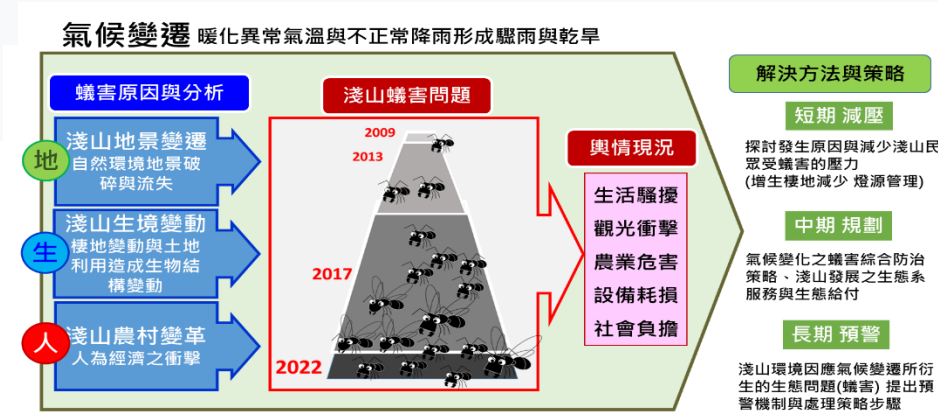


Figure 7: Discussion on and Solutions to the Problem of Pest Ant Damage Caused by the Impact of Climate Change on the Lowland Ecology and the Change of the Lowland Community

1.3.4 Chung-Chi Lin, Professor at the Department of Biology, implemented the “Field Survey on Ants in Farms Cultivated by Different Farming Methods,” showing that biodiversity can be protected in agricultural production while ants can play a role in ecological services, so as to achieve a socio-ecological-production landscape that allows the harmonious coexistence of agricultural ecosystems and organisms.



Figure 8: A paddy rice field in Yuli Township during spring



Figure 9: A pomelo garden in Majuli, Hegang Village, Hualien

1.3.5 Chung-Chi Lin, Professor at the Department of Biology, implemented the “Survey on Pasture Insect Resources in Fuxing Township, Changhua County” of the Council of Agriculture, Executive Yuan, in which 20,652 individual invertebrates belonging to six classes, 20 orders, and 101 families were collected. Among them, 20,215 individuals of Insecta belonging to 13 orders and 90 families were caught. Most of them belonged to Diptera (26.7%), followed by Coleoptera (21.1%), and Hemiptera (15.6%). Studies have shown that pastures in Fuxing Township can be restored over time, so it is believed that the existence of pastures around farmland is essential for increased biodiversity.



**Figure 10: Insect fauna specimen for pastures in Fuxing Township of Changhua County**

**2. NCUE's faculty members serve as the members of government agencies' committees advising policymakers on feasible strategies and specific actions for specific SDGs:**

**2.1 Professor Wei-Tzer Huang from the Department of Industrial Education and Technology serves as a member of the Electric Reliability Council of the Ministry of Economic Affairs, participating in meetings concerning Taiwan's long-term power load forecasting, renewable energy development, and power system operation reliability.**

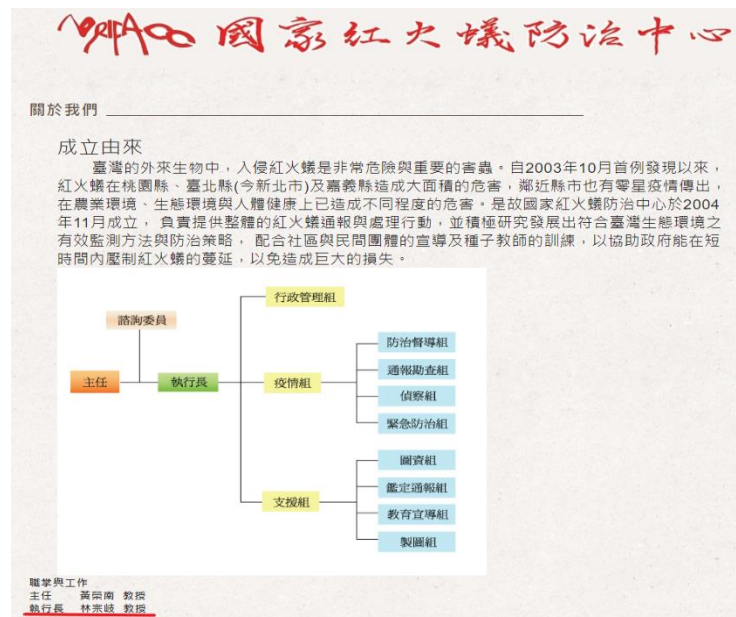


**Above figure: Professor Wei-Tzer Huang serves as a member of the Electric Reliability Council of the Ministry of Economic Affairs**

**2.2 Professor Chung-Chi Lin from the Department of Biology serves as the executive director of the National Red Imported Fire Ant Control Centre of the Council of Agriculture and is responsible for planning and implementing professional technical support and emergency control plans.** Among the exotic species in Taiwan, *Solenopsis invicta*, red imported fire ants or RIFA, are extremely dangerous pests. First found in Taiwan in October 2003, RIFAs have since invaded large areas in Taoyuan County, Taipei County (now New Taipei City), and Chiayi County, with sporadic outbreaks in neighbouring counties and cities. The RIFAs have caused varying degrees of harm to the agricultural environment, ecological environment, and human health. The National Red Imported Fire Ant Control Centre was established in November 2004 to provide overall



notifications and control actions on RIFA infestations. The Centre also researches effective monitoring methods and control strategies suitable for Taiwan's ecological environment, cooperates with communal and non-governmental organizations to educate the public about the problems, and helps train seeded teachers to help the government mitigate the spread of RIFAs. NCUE's Professor Chung-Chi Lin has been an expert consultant to the Centre since its establishment. Since 2015, he has served as the volunteer executive director of the Centre and is responsible for planning, implementing, and supervising professional technical support and emergency control projects.



**Above figure: Professor Chung-Chi Lin serves as the executive director of the National Red Imported Fire Ant Control Centre of the Council of Agriculture**

**2.3 Professor Der-Jiunn Deng from the Department of Computer Science and Information Engineering serves as a technology expert to the Department of Industrial Technology, Ministry of Economic Affairs.** For the past two years, Professor Der-Jiunn Deng has been a consultant with the Department of Industrial Technology (DoIT), Ministry of Economic Affairs, responsible for R&D and innovation in Taiwan's ICT. He supervises relevant institutions and companies to solve technical bottlenecks and increase Taiwan's ICT competitiveness

LINK: <https://trh.gase.most.ntnu.edu.tw/tw/article/content/188>

### SDG16.3.3

#### 題目: **Participation in government research – Year: 2020**

Undertake policy-focused research in collaboration with government departments

NCUE comprises seven colleges: Arts, Science, Engineering, Education, Management, Technology and Vocational Education, and Social Sciences and Physical Education. All colleges actively participate in government policy research projects to develop key policies or assist government departments in formulating policies and implementing strategies. Descriptions of some of the policy-oriented research conducted by the faculty members with the government departments follow:

According to statistics, NCUE faculty members in various departments are regularly commissioned by the government to design and implement policy-related projects. In 2021, the total number of cases reached 42, and the total commission fund reached 146.61113 million (for details, please refer to <https://rnd.ncue.edu.tw/files/90-1002-23.php>). Eleven faculty members implemented 12 policy-focused projects with the government. In addition, NCUE's Innovation Incubation Centre of the Research and Development Department implemented the "Science and Technology Care Project to Support Small and Medium-sized Enterprises" and the "Industry Guidance for Innovation in Industrial Parks Project."

#### 1. Assisting the government in implementing a research programme focused on reducing inequalities

1.1 Professor I-Chun Huang from the Graduate Institute of Rehabilitation Counseling implemented the "Using Action Research to Develop a Web-based Geographic Information System for the Employment Side in the Vocational Rehabilitation Services" project of the Ministry of Science and Technology, which used the framework of Web GIS and Google Maps to develop a web-based geographic information system for employment in vocational rehabilitation services, with the aim of facilitating professional communication and information exchange in the provision of vocational rehabilitation services and improving service quality.

Link: <https://www.grb.gov.tw/search/planDetail?id=13871753>

1.2 Ming-Hung Wang, Professor at the Graduate Institute of Rehabilitation Counseling, implemented the "2020 Taichung-Changhua-Nantou Vocational Rehabilitation Service Resource Center for People with Disabilities" project of the Ministry of Labor, to help improve the quality of occupational

rehabilitation services in the region and help people with disabilities obtain suitable jobs. During the implementation, we cooperated with regional NGOs, local governments, and departments of the central government.

Link: <https://vrrc.heart.net.tw/>

2. Helping the government implement research projects that focus on “Good Health and Well-being” policies:

2.1 Yu-Chung Wei, Professor at the Graduate Institute of Statistics and Information Science, implemented the “Integrated Genomic Analysis via Deep Learning for Phenotype Prediction” project of the Ministry of Science and Technology to examine the relationship between genetics and diseases using deep learning algorithms.

2.2 Yu-Chung Wei, Professor at the Graduate Institute of Statistics and Information Science, implemented the “Effect of Sit-To-Stand Intervention in the Intensive Care Unit Survivors: a Randomized Controlled Trial” project of the Ministry of Science and Technology to examine the effect of nursing intervention to the recovery of patients in intensive care units.

LINK:<https://www.grb.gov.tw/search/planDetail?id=14505491>

2.3 Hsin-Min Wang, Associate Professor at the Department of Sports, implemented the “Chronic Response of Knee Articular Cartilage in Volleyball Athletes: A Competitive Season” project. By monitoring the thickness of knee articular cartilages, the effect of exercise loads on knee articular cartilages was examined. The relevant influencing factors were also examined to provide insights useful for future exercise prescription designs.

2.4 Jong-Chang Tsai, Professor at the Department of Sports, implemented the “2020 Pilot Program of Assisting Grassroots Athletes with Sports Science” project of the Sports Administration of the Ministry of Education. It assisted 416 track and field athletes from primary and secondary schools in Taichung, Changhua, and Nantou areas by providing radar charts of physical and physical fitness assessments and offering advice on training, thus providing a reference that coaches can use to nurture talents and train players.

3. Helping the government implement research projects that focus on “Quality Education” policies:

3.1 Hsiao-Lin Tuan, Professor at the Graduate Institute of Science Education, implemented the “Project to Improve the Ability of Primary and Junior High School Natural Science Teachers in Examining Curriculum Design and Implementation” of the K-12 Education Administration, Ministry of Education to equip seeded teachers with curriculum design, implementation, and self-reflection skills.



Figure 1: Prof. Hsiao-Lin Tuan led teachers in examining curriculum designs.

3.2 Sung-Pei Chien, Professor at the Graduate Institute of Science Education, implemented the “An Exploratory Study of Pre-Service Teachers’ Beliefs about Technology-Based Assessments, Their Intentions to Use These Assessments, and the Relationships among Them” project of the Ministry of Science and Technology. This was a series of exploratory studies examining per-service teachers’ beliefs about technology-based assessments and their effect on the teachers’ intention to use them.

Appendix: 16.3.3A- Midterm report of Prof. Sung-Pei Chien

3.3 Sung-Pei Chien, Professor at the Department of Guidance and Counseling, implemented the “Research on the Development and Effects of Using Smart Chatbots in Empathy Training Courses” project of the Ministry of Science and Technology. In the study, users could use more diverse methods as they practiced empathy skills. The research process increased the multifaceted functions of chatbots, allowing them to record users’ emotions, expressions, and fluctuations; they could also engage in audio dialogues and talk with the users, so as to assess their empathy level and ability to use empathy.





Figure 2: An intelligent robot

LINK: <https://www.grb.gov.tw/search/planDetail?id=13862322>

3.4 Tsuei-Yuan Lai, Professor at the Department of Special Education, implemented the “Talents Cultivation Program with Teaching Materials and Teaching Methods of the University-An Exploration of Integrating Design Thinking into the Special Needs Curriculum for Elementary Gifted Students,” in which the process of design thinking was used to develop cross-discipline courses that integrated the development of creativity and affectivity and enabled gifted elementary students to understand the design thinking process.

Link: <https://drive.google.com/open?id=1zWOdZ6dFvKHUNFs8kcdJQEpVRC-RAPvj>

4. Helping the government implement research projects focused on “Affordable and Clean Energy” policies:

Chia-Jyi Liu, Professor at the Department of Physics, implemented the “Energy-Efficient Synthesis, Microstructure and Transport Property Characterization of Green Thermoelectric Materials” project. This project sought to synthesize potential thermoelectric materials in an energy-efficient way. It systematically examined the chemical reaction and physical mechanisms and analyzed the parameters of the materials using the SPBcal or SKBcal algorithm we had developed so as to adjust the material composition, composite composition, and process conditions, and obtain materials with similar or better  $zT$  values.

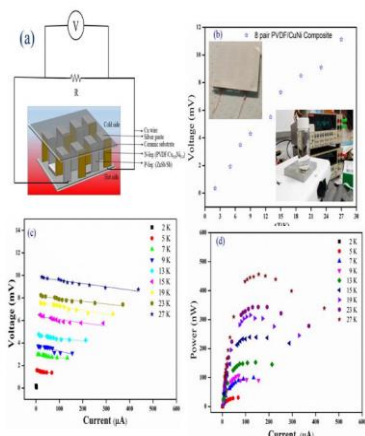


Figure 3: Professor Chia-Jyi Liu's research results (1)

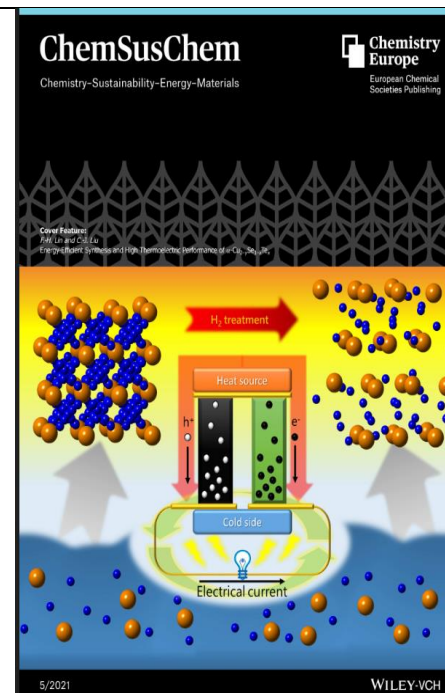


Figure 4: Professor Chia-Jyi Liu's research results (2)

## 5. Director Yang-Wei Lin of the Teaching Excellence Centre implements the 'Higher Education Sprout Project' of the Ministry of Education.

- 5.1 Policies and Plans: The second phase (2020–2022) of the University Social Responsibility (USR). Projects: 'Shetou Sock Projects: Innovation, Entrepreneurship, Revitalisation'; 'Deep cultivation in Fangyuan and Joining Hands in Dacheng: Changhua Twin Cities' Industrial and Environmental Sustainability' and 'Baisha x Common Good Education: Twelve-Year Compulsory Education project in Rural Areas'.
- 5.2 Empirical evidence and results: NCUE's USR projects have unique characteristics. The Teaching Excellence Centre continues to strengthen the support system and encourage faculty members and students to study and propose USR-related research plans on teaching practices and participate in project-based practical courses that can solve local problems. The projects integrate the concepts of corporate social responsibility (CSR) and environmental, social, and corporate governance (ESG) to realize the United Nations' SDGs, effectively driving faculty members and students to solve local issues for win-win situations in sustainable development and the circular economy.

This achievement report has been made public, please refer to the website:

<https://sites.google.com/gm.ncue.edu.tw/ncueable/%E6%88%90%E6%9E%9C%E5%B0%88%E5%8D%80>

6. In the 2021 academic year, NCUE's Innovation Incubation Centre of the Research and Development Department implemented the "Science and Technology Care Project to Support Small and Medium-sized Enterprises" and "Industry Guidance for Innovation in Industrial Parks" projects on behalf of the Ministry of Economic Affairs, and helped enterprises to obtain subsidies from the government. The results of the guidance are as follows:

(1) Science and Technology Care Project to Support Small and Medium-sized Enterprises

- ① Participating enterprises/experts and scholars/students: 15/15/26
- ② New product/Technology development: 3 cases
- ③ Technical and talent training courses: 2 sessions
- ④ Applications for government subsidies: 4 applications/2 approved, with a total subsidy of 1.048 million NTD
- ⑤ Patent application and utilization: 3 cases
- ⑥ National competition: 5 cases

(2) Industry Guidance for Innovation in Industrial Parks Project

- ① Participating enterprises/experts and scholars: 80/20
- ② Technical guidance: 11 cases
- ③ Technical and talent training courses: 4 sessions
- ④ Applications for government subsidies: 2 applications, applying for a total subsidy of 4.653715 million
- ⑤ Productions based on student projects: 6 cases
- ⑥ Student internships: 28 people



Figure 1: Guidance case – Nuvo terprise Co., Ltd.



Figure 2: Guidance case – Hsi Jen Enterprise Co., Ltd.

SDG16.3.4

題目: **Neutral platform for discussing issues**

**Year: 2019 or 2020**

Provide a neutral platform and “safe” space for different political stakeholders to come together and discuss challenges frankly

## 2023 年英文內容

The teachers in various academic departments and colleges at NCUE not only carry out academic research and publish research results in different professional fields, but also create a neutral platform and safe space by organizing symposiums and outreach activities, among other programs. Besides publicizing and promoting relevant academic and professional achievements, they also invite different political stakeholders to gather at symposiums or for outreach activities to discuss various issues frankly and safely:

1. The “Forum on Forward-looking Issues and Trends in Education” held by the College of Education and Graduate Institute of Education:

Professor Sheng-Yao Cheng delivered a speech titled “The Beauty and Sadness of Education in Remote Areas,” opening a new perspective on remote areas and allowing people to focus on the uniqueness and advantages of remote areas instead of discussing their backwardness and scarcity. Participants discussed how to connect students’ “interests” with teachers’ “teaching” and agreed that students’ passions are the driving force for learning and reflect the achievements of their educators. The questions raised and discussions held between the speakers, teachers, and the audiences allowed people to learn more about the hopeful but rocky path of rural education. With the continuous devotion and hard work of their predecessors and partners in education, it is hoped that the teachers and students of the College of Education can make breakthroughs and innovations in rural education, create a more macro plan for education, and make education more appealing to people in rural areas.

Link: <https://www.ncue.edu.tw/p/406-1000-7790,r93.php?Lang=zh-tw>

2. The “Multi-faceted Revelation of Poetries, Regions, and Culture National Changhua University of Education University’s Academic Seminar on ‘Poetics and Changhua’”, held by the Department of Chinese and Graduate Institute of Taiwan Literature:

The Department of Chinese has hosted the distinguished Poetics Conference since 1991, over 30 years. As we approached the 300th anniversary of the founding of Changhua County, the conference focused on an exploration of “Studies of Changhua.” This included an integration and review of current academic results. It was hoped that a new vision of local studies would be developed through the conference.

Link: <https://www.ncue.edu.tw/p/406-1000-7626,r93.php?Lang=zh-tw>

3. The College of Education and the Association for Curriculum and Instruction, Taiwan, R.O.C. co-hosted the 2022 “Academic Seminar on Ubiquitous Learning and Innovative Teaching and the 45th Forum on Curriculum and Instruction”. Two foreign keynote speakers and two Taiwan keynote speakers were invited to deliver speeches at the conference. A Taiwanese scholar served as the speaker at the Education Innovation and Development Forum. A round-table discussion was held focusing on six articles. After the review, 18 submitted articles were published. In the

sessions devoted to the articles, 10 Taiwanese scholars took turns serving as moderator and commentator. All submitted articles were related to the two topics of “Ubiquitous Learning” and “Innovative Teaching.” The academic exchanges during the seminar allowed participants to learn about international standards, which helped foster academic communities based on international cooperation and created opportunities for NCUE to cooperate with prestigious international institutions, thus benefiting Taiwanese talents interested in and planning for curriculum and teaching research.

Link: <https://www.ncue.edu.tw/p/406-1000-7475,r93.php?Lang=zh-tw>

4. In the forum on forward-looking issues and trends in Education, a session titled “Establishment of a System View-Daily Practice of Systematic Dialogue” was held by the College of Education and the Department of Guidance and Counseling. In the forum, Professor Li-An Kuo from the Department of Guidance and Counseling moderated a passionate discussion among teachers and students on the session’s family therapy topic. Prof. Kuo's continuous and in-depth efforts in education training and research development will definitely open up magnificent avenues for innovation and leadership at the College of Education and the Department of Guidance and Counseling.

Link: <https://www.ncue.edu.tw/p/406-1000-7268,r93.php?Lang=zh-tw>

5. The “37th International Symposium on Science Education,” held by the Graduate Institute of Science Education, focused on “Cross-Discipline Learning and Teacher Training in Science Education.” The topics discussed included STEM/STEAM education, education on ability development, literacy-based assessment, training for pre-service teachers and the professional growth of in-service teachers, and digital learning environments and smart learning; these are all important topics in the research of science education at home and abroad. Four distinguished scholars were invited from several countries, including the United States and India, and the symposium was recognized by the East-Asia Association for Science Education (EASE). In addition to the dialogue between Taiwanese researchers and teachers, we also promoted international dialogue and exchange between science education researchers, in-service science teachers, and pre-service teachers via the symposium. Eighty academic papers were submitted to the symposium, and more than 150 teachers at all levels participated online and in person. The results are compiled and published in the symposium’s leaflets.

Link: <https://www.ncue.edu.tw/p/406-1000-6522,r93.php?Lang=zh-tw>

6. The Special Education Center held the “2021 International Symposium on Career Development and Transition of Students with Special Needs.” Scholars from the United States, South Korea, Singapore, and other countries were invited to give keynote speeches, while Taiwanese scholars and experts in related fields were also invited to give speeches on their research on career development and transition among students with special needs. In-depth discussions and academic exchanges were carried out in the symposium.

Link: <https://www.ncue.edu.tw/p/406-1000-6220,r93.php?Lang=zh-tw>

7. The American Institute in Taiwan (AIT), NCUE, and the Changhua Office of the Yuan T. Lee Foundation Science Education for All jointly organized the “Science Camp for High School Girls.” The AIT also collaborated with NCUE’s Department of English, English-Medium

Instruction Research Center, and the Department of Education of Changhua County Government in inviting distinguished bilingual education expert Dr. Adrienne Johnson to lead a teacher workshop on STEM (Science, Technology, Engineering, Math) education, through the assistance of the US Department of State's English Language Specialist Program. Dr. Adrienne Johnson trained teachers in the skills and professional knowledge required to use English to teach various subjects and trained a group of students with excellent English skills through a training course for English talents.

Link: <https://www.ncue.edu.tw/p/406-1000-6189,r93.php?Lang=zh-tw>

8. The Department of Geography held the "2021 Annual Geography Conference and Symposium of China." The theme of the symposium was "2021 New Geography: Urban-Rural Relations, Environmental Governance, Generational Inheritance and Technological Innovation." The aim was to interest more young scholars in geographical research. It was also hoped that industries, the government, and academia could conduct a cross-generational and cross-practice dialogue. A total of 67 academic papers and 16 posters were published online during the symposium, and 93 academic papers were recorded.

Link: <https://www.ncue.edu.tw/p/406-1000-4559,r93.php?Lang=zh-tw>

SDG16.4.1

題目: **Proportion of graduates in law – Number of graduates (This is the total headcount number of graduates at all levels from the institution in the year 2020)**

**Number of graduates :**

There are 47 graduates from doctoral program, 948 graduates from master's programs (523 from full-time programs, 425 from on-the-job programs), 1158 graduates from bachelor's programs, making a total of 2153 graduates.

**Number of total graduates from law and enforcement related courses :**

There were 8 graduates from doctoral programs, 155 graduates from master's programs (84 from full-time programs and 71 from on-the-job programs), and 668 graduates from bachelor's programs, making a total of 831 graduates.

Course Title (Chinese/English)	Number of students
中華民國憲法(一)The Constitution of R.O.C-Session I	31
中華民國憲法(二)The Constitution of R.O.C-Session II	30
少年事件處理法 Juvenile Delinquency & Acts	30
比較憲法 Comparative Constitutional Law	4
民法(一)Civil Law(I)	30
民法(二)Civil Law(II)	17
民法專題研究 Seminar on Civil Law	10
民法概要 Civil Law Essentials	99
民法概論 Introduction to Civil Law	54



民法總則(一)Civil law: General Principles	1	
交通與法律生活 Traffic, laws and life	170	
刑法(一)Criminal Law(I)	36	
刑法(二)Criminal Law(II)	23	
行政法 Administration Law	33	
行政法(一)Administrative Law(1)	30	
行政法(二)Administrative Law(2)	23	
行政法專題研究 Seminar on Administrative Law	15	
技職教育政策與法規專題研究 Study of Technical Vocational Education policy and laws	1	
法律與現代生活 Laws & Modern Life	222	
法學緒論 Introduction to Juristics	37	
社會政策與社會立法 Social Policy and Social Legislation	28	
金融法規 Financial regulation	7	
金融專案,購併及相關法律議題 Project Finance, Procurement Legal Aspects	1	
科技法律 Science and Technology Law	119	
特殊教育行政與法規 Administration & Legislation of Special Education	61	
特殊教育行政與法規研究 Seminar in Administration & Legislation of Special Education	6	
租稅法規研討 Seminar on Tax Regulations	31	
商事法 Business Law	121	

商事法概論 Intro. to Business Law	48	
教育法規專題研究 Seminar on Legal Issues in Education	3	
勞動法 Labor Law	27	
勞動經濟與勞動法專題研究 Special Topics in Labor Economics & Labor Laws	3	
智慧財產權法 Laws of Intellectual Property Rights	5	
稅法專題 Topics of Tax Laws	60	
稅務法規 Taxation	91	
會計審計法規 Accounting Regulations	12	
資訊工程與科技法律 Information Technology and Technology Law	2	
運動裁判法 Sport Officiating	37	
憲法與生活 Constitutions and Life	3	
諮商倫理與法規研究 Seminar in Ethical & Legal Issues in Counseling	32	
轉型正義與人權法制 Transitional Justice and Human Rights Law	11	
證券交易法 Securities and Exchange Law	18	
中華民國憲法總論 An Introduction to Constitution in R.O.C	3	
中華民國憲法總論專題研究 Seminar:An Introduction to Constitution in R.O.C	11	
地方制度法專題研究 Seminar on Local Government Act	2	

校園法律問題專題研究 Seminar on Legal Issues Occurring at Campus	13	
租稅法專題研究 Seminar on Tax Law	3	
勞動法律 Labor Law	1	
總計 Total	1655	