



University : National Chin-Yi University of Technology
Country : Taiwan
Web Address : www.ncut.edu.tw



[SDGs 17] Partnership for the Goals 全球夥伴

[17.3.8] Please indicate if your university publishes progress against SDG8?

Introduction and Institutional Commitment

NCUT) actively promotes SDG 8 by integrating career development, youth empowerment, and sustainable economic growth into its teaching, research, and outreach strategies. The university publishes progress through its official SDG portal, highlighting concrete actions, indicators, and partnerships that align with the UN 2030 Agenda.

1. Youth Employment and Skills Development

- **Campus Career Fairs** (April 2025): With 90 companies and nearly 2,000 openings, NCUT directly connected students with employers in precision machinery, electronics, and service industries.
- **Career Exploration Seminars with Coretronic Corporation**: Offered international students exposure to cross-border career opportunities in Taiwan and Vietnam.
- **Smart Manufacturing Talent Development Base (with Siemens & Chien-Chiang Technology)**: Provides hands-on training with NT\$500 million worth of advanced industrial software, preparing students for digital twin, automation, and machining industries.

2. Industry–Academia Collaboration for Growth

- **Strategic Partnerships**: NCUT collaborates with leading companies (Largan Precision, Hiwin Technology, Siliconware, etc.), providing internships, part-time work, and research engagement.
- **Global Talent Recruitment**: Events like Coretronic’s on-campus seminar aim to recruit outstanding foreign graduates, supporting Taiwan’s role in international industry networks.

3. Youth Empowerment and Inclusive Growth

- **Yunus Social Business Center**: Advances social business models that empower students to innovate and engage in sustainable entrepreneurship, directly linked to SDG 8 target 8.6 (reducing youth unemployment and NEET rates).



- **Workplace Readiness Programs:** NCUT hosts workshops on soft skills, stress management, and national exam preparation, ensuring that students are equipped for both employment and entrepreneurship.

4. Research and Innovation

- NCUT invests heavily in sustainability research, with dedicated funding streams for projects tied to energy efficiency, carbon reduction, and industrial upgrading.
- Research outputs feed directly into job creation and industry transformation, reinforcing SDG 8.2 (higher economic productivity through innovation).

5. Public Reporting and Transparency

- **Dedicated SDG 8 Portal:** NCUT maintains a public webpage showcasing SDG 8 progress, strategies, and outcomes.
- **Global Benchmarking:** NCUT aligns reporting with THE Impact Rankings, providing evidence-based progress toward decent work and economic growth.

6. Enhancing Practical Learning and Innovation

- **Industry Expert Co-Teaching**

NCUT integrates academic and practical expertise by inviting seasoned industry professionals to co-teach with faculty. These collaborations enrich the curriculum, bridge the gap between theory and practice, and ensure students gain relevant industry-oriented knowledge. Experts and faculty jointly design courses, guide students, and develop practical teaching materials.

- **Internships**

Off-campus internship courses are widely promoted across departments. These placements provide students with direct exposure to real-world work environments, helping them cultivate professional skills, adapt to workplace cultures, and improve their employability.

- **Professional Competitions**

Students are encouraged to demonstrate their expertise by joining professional and academic competitions. NCUT supports participants with subsidies for materials, travel, and participation fees, while outstanding performance is rewarded with financial incentives ranging from NT\$1,000 to NT\$20,000. This not only nurtures professional growth but also boosts confidence and recognition in industry.

- **Innovation and Entrepreneurship Competitions**

Through the **Smart Taichung Innovation and Entrepreneurship Promotion Base**, NCUT fosters creativity and entrepreneurship. The initiative integrates school, community, and



government resources to encourage innovation, support creative education, activate local industries, and help students transform ideas into practical entrepreneurial projects.

- **Establishment of Start-up Teams**

Under the Ministry of Education’s **University Innovation and Entrepreneurship Education Promotion Plan**, NCUT cultivates entrepreneurial culture on campus. Start-up teams are supported through competitions, training, and mentorship, with achievements like the **“InDestiny” music social platform**, recognized as “outstanding” in the 2023 national review.

- **International Exhibitions of Inventions**

NCUT showcases its innovation globally by sending outstanding patented works to prestigious exhibitions such as the *Moscow Archimedes Salon of Inventions*, the *iENA Nuremberg Fair*, the *Seoul International Invention Fair*, and the *Taiwan Innotech Expo*. This enhances the university’s global visibility and international collaboration opportunities.

- **R&D Achievements and Technology Transfer**

Through the **Guidelines for R&D Outcomes and Technology Transfer Management**, NCUT provides subsidies for patents, supports technology transfer, and promotes industry-university collaboration. This ensures innovative research is transformed into real-world applications, boosting industrial development and job creation.

7. Bachelor Program Teaching for Industry-University Cooperation

- **Industry-University Joint Cooperation 2.0 – Special Teams**

Since 2007, NCUT has been a key participant in the Ministry of Education’s **Industry-University Joint Cooperation Plan**, running 87 classes across 10 departments and producing 2,607 graduates. The upgraded **2.0 model** continues to strengthen the “learning by doing” approach, aligning talent cultivation with industrial needs.

- **Industry-Academia Training Program**

In partnership with the **Workforce Development Agency**, NCUT offers specialized training in **machine tools and precision mold design and manufacturing**. Known for its excellent reputation, the program has maintained a **100% employment rate for 17 consecutive years**. Training is aligned with digital technology and sustainability trends, ensuring relevance in future industries.

- **Vocational Dual System Training Project**

Since 2016, NCUT has provided dual-track training that combines academic study with workplace practice. Supported by tuition subsidies and stipends from businesses, the project allows students—including those from disadvantaged backgrounds—to reduce financial



burdens while earning degrees and certifications. This program is now integrated into **Industry-University Joint Cooperation 2.0**.

- **Special Classes for Foreign Students**

Aligned with the **New Southbound Policy**, NCUT established international special classes in 2017 to attract students from Southeast Asia. These programs are tailored to Taiwan's industrial needs and ensure international students receive education that directly prepares them for the workforce.

8. Career Growth and Corporate Development

- **The Industry In-Service Talent Development Center**

To support lifelong learning, NCUT operates an in-service talent development center offering advanced training in software and machining technologies. Courses such as **Solidworks, NX-UG, and PowerMill five-axis machining** enhance the skills of both current students and working professionals, aligning with industry demands.

- **Interdisciplinary R&D Center**

The Machine Tool-Building Department hosts a dedicated **Interdisciplinary R&D Center** for technological innovation in mechanical intelligence and smart machinery. It collaborates with enterprises to apply advanced technologies, while also training high-level talent. This initiative strengthens NCUT's global reputation and positions Taiwan as a leader in intelligent manufacturing.

Alignment with SDG 8 Targets

- **Target 8.2:** Raising economic productivity through innovation and research-driven growth.
- **Target 8.3:** Promoting development-oriented policies that support entrepreneurship and decent job creation.
- **Target 8.5:** Ensuring productive employment opportunities for young graduates and lifelong learners.
- **Target 8.6:** Reducing the proportion of youth not in employment, education, or training through dual-system and industry-academia programs.
- **Target 8.9:** Enhancing global competitiveness by fostering entrepreneurship and international recognition of innovation.

A. Promoting Education and Training

(A) Industry Expert Co-Teaching

To enhance teaching quality and strengthen students' practical knowledge, NCUT invites industry professionals with extensive practical experience to co-teach specialized practical courses with our faculty. These industry experts and course instructors collaboratively plan the curriculum, conduct co-teaching sessions, guide students, and compile and create relevant practical teaching materials.



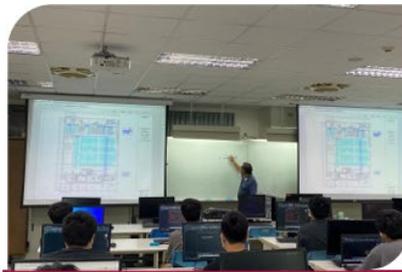
▲ Organic Chemistry



▲ General Chemistry Experiment



▲ Creative Script Writing



▲ Industrial Power Distribution Design Internship



▲ Energy-Saving Technology in Refrigeration and Air Conditioning Internship

(B) Internships

To enhance students' practical skills, departments are encouraged to offer off-campus internship courses. Student participation in the internship program helps them understand the employment environment, gain practical experience, and develop industry-specific skills, thereby strengthening their physical and practical capabilities. These efforts aim to enhance students' competitiveness in the workplace.



▲ A briefing session was held with TSMC representatives, who explained the personal qualities, professional background, and English proficiency required to join TSMC. Through interactive discussions, students gained insights into the potential challenges in the internship work environment, helping them better understand the skills needed in the workplace and enhance their professional abilities.



▲ Faculty members visited Delta interns to understand their practical work content and work regulations, providing guidance on their learning and daily life.



▲ Every semester, NCUT holds University-Level Off-Campus Internship Committee meetings. These meetings invite external legal experts, representatives from internship institutions, parent representatives, student representatives, and teaching and administrative supervisors to collaboratively build NCUT's off-campus internship mechanism, ensuring the integration of learning and practical application.



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(C) Professional Competition

We encourage students to participate in professional competitions by providing subsidies for material costs or business expenses of NT\$15,000, and travel expenses for two students on the day of the competition if they reach the finals. Details of available subsidies are provided in the Subsidy Points for Participating in Professional Competitions or Performances. After the competition, awards ranging from NT\$1,000 to NT\$20,000 are granted depending on the organizing entity, target participants, and ranking, as outlined in the Key Points for Rewards for Students Participating in Academic and Professional Competitions.



▲ Golden Award for WoW ORC at the 2022 Climate Change Innovation Competition



▲ Unmanned Freeway Resting Station in 2050 Won First Place at the 2022 Smart Freeway Landscape Competition



▲ 2022 National Smart Living Five Innovation Competition Water Hardware – Creative Marketing Category: "Electric Towel Rack" – Third Place



▲ Preparation of Biomass Coffee Capsules Using Agricultural, Forestry, Fishery, and Animal Husbandry Recycling Materials: First place in the 2023 National Technical College Students Practical Topic Production Competition and Achievements



▲ 2023 First Mitsubishi Electric Automation Contest: Development and Design of Smart MQL and Automatic Cutting Temperature Monitoring Integrated Technology – Champion



▲ 2023 National Hydrogen Car Race: "Electrolyte IV" – First Place in the Dynamic Competition and Second Place in the Static Competition

(E) Establishment of a Start-up Team

To promote innovation and entrepreneurship education policy in higher education, the University Innovation and Entrepreneurship Education Promotion Plan has been implemented, which aims to shape a culture of innovation and entrepreneurship on campus, encouraging universities to offer courses in innovation and entrepreneurship to enhance knowledge and skills in professional fields and strengthen practical abilities in creativity, innovation, and entrepreneurship. Assisting start-up teams within universities is a key goal under this plan, implemented through competitions on the University Innovation and Entrepreneurship Practical Learning Platform. This approach ensures team operation supervision and the establishment of a start-up company database.

NCUT's "InDestiny" music social platform was recognized as "outstanding" in the second phase of the Ministry of Education's 2023 Annual University Innovation and Entrepreneurship Education Promotion Plan – University Entrepreneurship Practical Learning Platform.



▲ InDestiny Music Social Platform by a Startup Company Team

among others.



▲ Taiwan Innotech Expo (TIE)



▲ Seoul International Invention Fair (SIIF) in the Republic of Korea



▲ Moscow International Salon of Inventions and Innovative Technologies "Archimedes" in Russia



(B) Interdisciplinary R&D Center

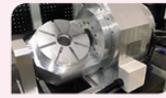
By establishing an R&D team dedicated to technological innovation and research, and by bringing in skilled research professionals, NCUT's Machine Tool-Building Department aims to delve deeply into the development of new technologies. Through this initiative, we intend to not only assist enterprises in the application of these technologies but also to develop high-level talent in mechanical intelligence. We anticipate that these efforts will enhance our influence and international reputation in related fields.

Machining equipment module

Name of team	Main technology developed	Achievements
The professional product manufacturing machine R&D team	A special paper straw forming machine has been designed, utilizing innovative environmentally friendly paper raw materials. It incorporates unconventional ultrasonic bonding technology and forming methods commonly used in the industry.	<ul style="list-style-type: none"> The development of tubular paper straw manufacturing equipment has been successfully completed, and we have obtained new patents and invention patents for its application. Furthermore, we have achieved the goal of automated production, and rigorous testing has been conducted with more than 30,000 cycles of no-load testing performed continuously.
The intelligent high-precision machining equipment R&D team	Technical R&D of small intelligent high-precision multi-axis machining equipment integration.	<ul style="list-style-type: none"> Signing of a technological transfer contract worth NT\$ 2 million. Acquisition of a small industry-university plan from the Ministry of Science and Technology through cooperation with Jftek Co., Ltd. with a NT\$ 600,000 subsidy from the Ministry of Science and Technology.
The oil pressure center frame R&D team	Development and design of oil pressure center frame of for machines.	<ul style="list-style-type: none"> Completion of a patent application for the oil pressure center frame of a linear slide rail device. Completion of a technological transfer of NT\$1 million.



▲ Tubular Paper Straw Manufacturing Equipment



▲ Intelligent High Precision Machining Equipment



▲ Oil Pressure Center Frame

D. Promote Employment

(A) Campus Job Fair

To form industrial clusters between the university and enterprises, attract students to return to their hometowns for employment, and promote regional economic growth, NCUT organizes a Campus Job Fair and company briefings each academic year to enhance recruitment of industries in Central Taiwan and the employment of NCUT students. These events facilitate job-matching by hosting large-scale, university-wide recruitment fairs, well-known company briefings, on-site job matching, and resume clinics. These activities help students understand company characteristics early, foster industry interaction, increase employment opportunities and enhance students' job competitiveness. The effectiveness of the Campus Job Fair from the past three years is shown in Table 29.

Table 29: Statistics on Campus Job Fairs

Academic year	Participating companies	Job vacancies	Notes
2021	94	3,663	Online matchmaking
2022	90	2,255	Change of venue
2023	90	2,759	



▲ Campus Job Fair