



907

international co-authored publications in 2019
(35.7% of all NCTU publications in 2019)

296

 international partner institutions.

In 2019, NCTU offered

212

 related courses.

Proactively participating in international organizations to build transnational communication and entrepreneurial opportunities

NCTU proactively joins various international organizations, which not only increases the international visibility of NCTU, but also further enhances the participation of NCTU in the international arena.

1. The Association of East Asian Research Universities (AEARU)

AEARU was founded in 1996 as a regional research organization in East Asia. Its current members include 19 research-oriented universities from Japan, South Korea, Mainland China, Hong Kong Special Administrative Region and Taiwan. NCTU joined the AEARU in 2018. In addition to proactively participating in activities organized by international higher education organizations, NCTU also actively devoted to and hosted student summer camps, sports competitions, workshops and academic seminars, so as to increase opportunities for NCTU teachers and students to be in line with the international academic communities. For example, NCTU and AEARU have cooperated to develop the Global Learning Initiatives Program and provided theme-based interdisciplinary courses for students to access diversified resources and experience international learning environment by communicating with teachers and students from different universities.

2. University Alliance in Talent Education Development (UAiTED)

The University System of Taiwan collaborated with Sayling Wen Cultural and Educational Foundation, together with the prestigious universities in Singapore, Malaysia, Hong Kong and Taiwan, to jointly establish the University Alliance in Talent Education Development (UAiTED) in 2019. The goal of UAiTED is to implement projects creating connections among students, industries and universities, and bridge talent recruitment and cooperation between universities and industries. In addition to carrying out internship programs in foreign enterprises and training courses for exquisite service talents, it also promotes innovation and entrepreneurship cultivation and competition-related activities. UAiTED strengthens academia-industry cooperation to put knowledge into practice and transfer technology to business, and promotes sustainable social development. UAiTED forms a forum for all walks of life to work closely with the universities and cultivate future global academia-industry talents together.



Promoting smart agriculture with artificial intelligence technology and enhancing international cooperation

AgriTalk Technology was founded at the end of 2019 by Lifetime Chair Professor Jason Yi-Bing Lin from the Department of Computer Science, Associate Professor Wen-Liang Chen from the Department of Biological Science and Technology, and Chien-Chang Chen, founder of the Internet of Thing (IoT) company as well as the executive director of the non-toxic intelligent agricultural system of NCTU. The team created the "Non-toxic Intelligent Agricultural System - AgriTalk Management Platform" and developed six artificial intelligence (AI) management systems, including pest prediction, disease prediction, water-saving irrigation, fertilization control, temperature control, and light control, on the basis of IoT structure. This agricultural system can simultaneously collect environmental and fieldwork data, and produce food traceability that meets the Guidelines for Good Agricultural and Wild Collection Practice (GACP) of Medicinal Plants through blockchain technology, to ensure the safety, efficiency, and quality of crops. The team participated in Consumer Electronics Show (CES) in Las Vegas in January 2019, attracting attentions of Japan, Dubai, Chile, Canada, India, Philippines, Italy and other countries, and even received a call from the President of Romania, who hoped to introduce this technology to Romania to promote smart agriculture. Since then, international cooperation with Romania has been started.



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Collaborating with the President of the Global Citizenship Education of the United Nations Educational, Scientific and Cultural Organization (UNESCO) to promote sustainable development of the world through education

NCTU Global Citizenship Education Center (NCTU-GCEC) is the first research center founded on the theme of global citizenship education in Taiwan, aiming to improve the research and teaching development of global citizenship education. It holds seminars and training activities, promotes exchanges and cooperation with neighboring countries, and establishes a global platform for the research and practices of global citizenship education.

The promotion of global citizenship education in national curricula is highlighted in the "Education 2030 Framework for Action" proposed by UNESCO in 2015 and regarded as one of the crucial implementation strategies to achieve target 4.7 of the Sustainable Development Goals (SDG4 Quality Education). The NCTU-GCEC has built long-term partnership with Professor Carlos A. Torres, who is the UNESCO Chair in Global Learning and Global Citizenship Education and a professor at UCLA. As the chair professor and international director, Professor Torres will work with the NCTU-GCEC to achieve the following goals:

- Conduct academic research with scholars around the world to promote relevant research programs, and lead Taiwan scholars to participate in UNESCO activities and publish research findings;
- Organize lectures, workshops, seminars, educational training programs and other activities to enhance the awareness and discussion between Taiwan and neighboring countries of global citizenship education issues, and propose theoretical and practical solutions for the implementation of global citizenship education in Taiwan; and
- Promote communication with academic institutions in neighboring countries and establish connections with non-governmental organizations, to make Taiwan a base of global communication forum for global citizenship education research and practices.

Aligning with seven countries for the establishment of a Global Hakka Research Alliance as a pioneer in Hakka research

After a year of preparation with the support of the Hakka Affairs Council in Taiwan, NCTU established the "Consortium of Global Hakka Studies (GHAS)" at the College of Hakka Studies in 2019. Eleven academic institutions from seven countries have signed a memorandum of cooperation, which aims to improve the quality of Hakka and Ethnic studies, and to share the results of Hakka research and Hakka movement experience with the international academic communities. The founding members include Hakka Academic Development Committee of the Hakka Affairs Council, National Central University, NCTU, National United University and National Kaohsiung Normal University in Taiwan, University of Hyogo of Japan, Petra Christian University of Indonesia, University Malaya of Malaysia, National University of Singapore, Mahidol University of Thailand, and San Francisco State University of the United States.

