

成先啟後能成其大

Inheriting the past and ushering in the future could lead to one's success.





National Cheng Kung University



Outline

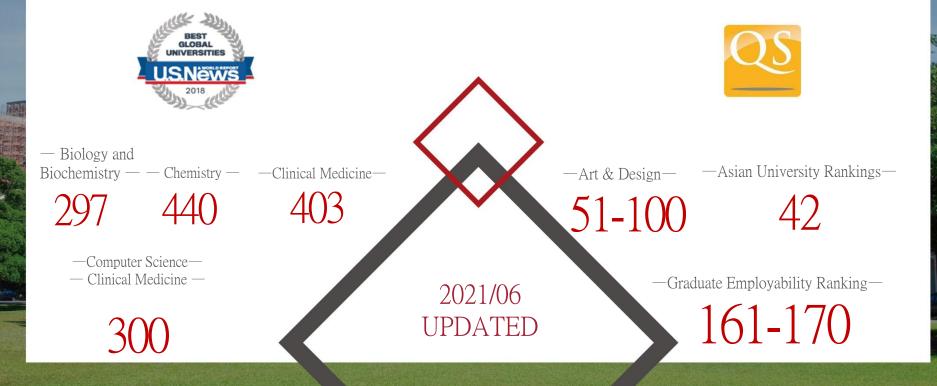
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Achievement History Research Industry

Ranking and Performance



Subject Ranking

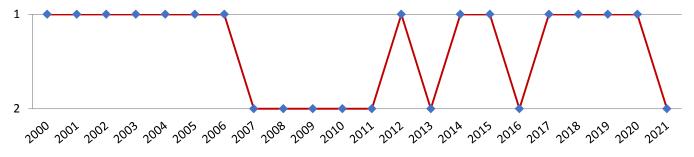


Enterprises Favorite College Students



Acquired for 20 years, and won 4 times in the past 5 years.

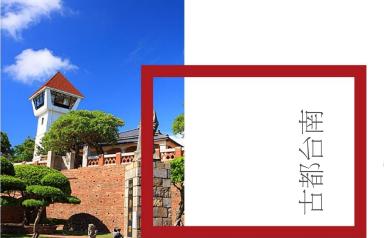
- Interpersonal communication and teamwork.The ability to solve problems.
- Performance exceeds expectations.



---- Rank







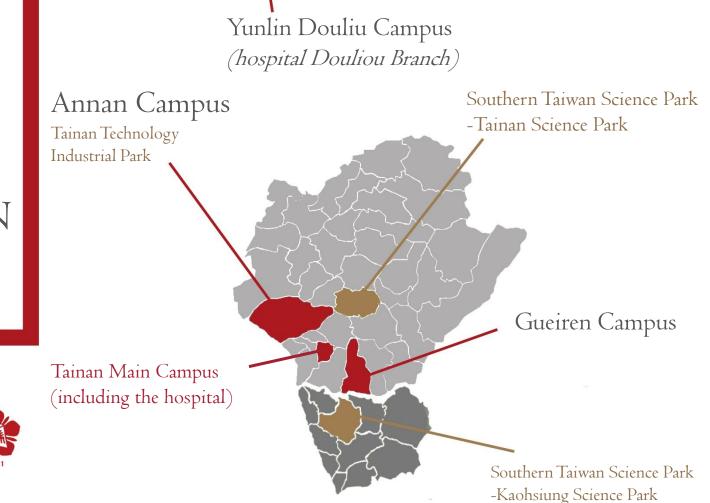




The oldest city in Taiwan, which is well woven into the fabric of rich culture and interesting anecdotes.

NCKU Location

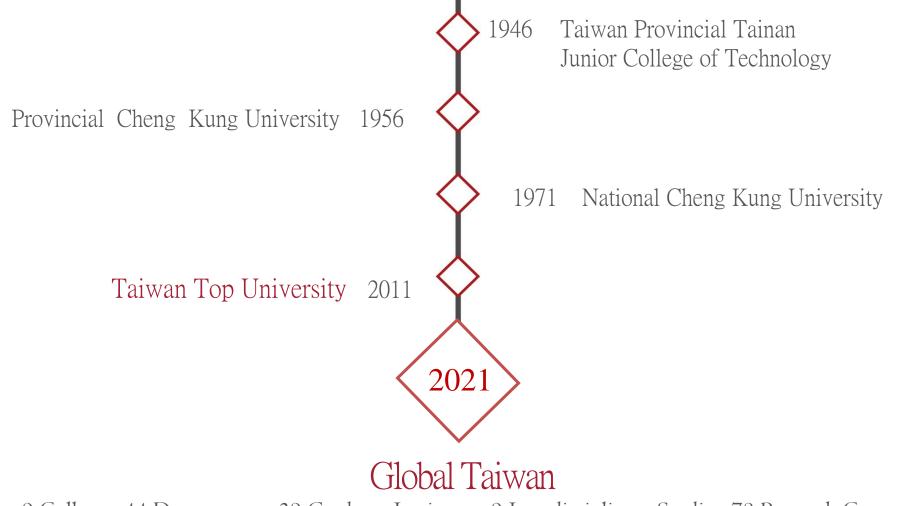
DB



HISTORY OF NCKU

—Tainan Technical College—





—9 Colleges, 44 Departments, 39 Graduate Institutes , 9 Interdisciplinary Studies ,78 Research Center—

NCKU Students

Staffs



6,311







Bachelor 11171 Master 8048 Ph. D 1818



=NCKU hospital=



894







1,140

-America-

(Collaboration)

Professor Exchange: 1 plans Student Exchange:11 plans Letter of Intent :1 plan Extensive cooperation :52 plans Dual Degree:18 plans Others:1 plan

Total 88 cooperative

-Africa-

(Collaboration)

Extensive cooperation :1 plans Student Exchange: 1 plan

-Oceania-

(Collaboration)

88

Dual Degree: 2 plans Extensive cooperation :9 plans Student Exchange: 2 plans

Total 13 cooperative school institutions

-Europe

343

ontinent Overview

3

Student Exchange :42 plans Professor Exchange:11 plans Extensive cooperation :60 plans Dual Degree : 16 plans Erasmus World Program Master 's Joint Program-COSI Education Cooperation Program :1 plan Letter of Intent :1 plans Honorary Doctorate : 1 plan Study Degree:2 plans Intern:1 plan EU FP7 "QB50 Project" :1 plan EU Erasmus Project :1 plan

Total 115 cooperative school institutions

-Asia-

(Collaboration)

Dual Degree : 23 plans Extensive cooperation :169 plans Student Exchange : 94 plans Professor Exchange:22 plans Letter of Intent :6 plans Others:3 plans Service learning :1 plans Museum cooperation :1 plans Intern:4 plans Language:1 plans EU Erasmus Project:1 plan Scholarship:2 plans

ⁱTotal 343 cooperative school institutions

- Transcontinental -

(Collaboration) Extensive cooperation :1 plans

-America-



Appalachian State University Case Western Reserve University **Temple University** Texas Tech University Illinois Institute of Technology San José State University University of Tennessee, Knoxville University of California University of Kentucky University of Oklahoma Southern Illinois University. Carbondale The University of Alabama at Birmingham University of Arizona University of Southern California Pepperdine University University of Delaware Drexel University University of South Florida University of Houston

Harvard University

Auburn University Georgia State University University of Texas at Arlington Columbia University in the City of New York South Dakota School of Mines and Technology Purdue University Fort Wayne State University of New York at Buffalo Argonne National Laboratory Villanova University Texas A&M University San Diego State University Purdue University Trinity International University University of Missouri University of Washington University of Georgia University of California, Berkeley Colorado State University University of Alaska University of Cincinnati The Washington Center University of Mississippi **Tulane University** University of Kansas California Polytechnic State University **College for Creative Studies** University of Texas at Dallas

Arizona State University University of Iowa **Oregon State University** NYU Poly University of Chicago Seattle University The Ohio State University University of California at Los Angeles Rochester Institute of Technology Villanova University Brown University University of California, San Francisco University of Minnesota Cleveland Clinic Wavne State University University of North Texas Oklahoma State University University of Florida University of Illinois, Urbana-Champaign University of Texas-San Antonio Sam Houston State University University of Rochester Georgia Institute of Technology State University of New York, SUNY University of California-San Diego







IngenieríayTecnología



National University of Asuncion



University of San Carlos of Guatemala



University of York École Polytechnique de Montréal University of Calgary University of Waterloo University of Victoria Memorial University of Newfoundland

2021 Partner School/Institution Overview -Europe(1)-

Centrale Nantes Université Paris VI Université Toulouse-III-Paul-Sabatier Université Montpellier 2 Institut Supérieur de l'Aéronautique et de l'Espace Institut polytechnique de Bordeaux TeleFM Normandie com Ecole de Management Institut national de recherche en informatique et en automatique Rennes School of Business **ICN Business School** École Nationale de l'Aviation Civile **ENSCI - Les Ateliers** Université Gustave Eiffel Institut national polytechnique de Toulouse University of Versailles Saint-Quentin-en-Yvelines Université de Toulouse Institut National des Sciences Appliquées de Rennes, INSA de Rennes Université Paris I IPAG Business school CESL FPITA École française d'Extrême-Orient Université Grenoble AlpesLille Catholic University



Leiden University Delft University of Technology University of Groningen

University of Ostrava Technical University of Ostrava Czech Technical University in Prague Brno University of Technology Masaryk University University of Hradec Kralove University of West Bohemia

University of Birmingham Lancaster University University of Nottingham The University of Manchester University of Leeds University of Essex Coventry University University of Glasgow University of Glasgow University of the West of England University of Southampton University of Southampton University of Sheffield University of York Keele University University College London



Catholic University of Leuven von Karman Institute for Fluid Dynamics University of Brussels VITO



University of Hannover Technical University of Munich Goethe University Frankfurt Technical University of Darmstadt RWTH Aachen University Aachen University of Applied Sciences University of Tübingen University of Wurzburg University of Passau University of Hamburg Hamburg University of Technology Bauhaus-Universität Weimar

2021 Partner School/Institution Overview -Europe(2)-



Johannes Kepler University Linz University of Innsbruck Management Center Innsbruck FHWien der WKW, University of Applied Sciences for Management & Communication



The University of Milan Sapienza University of Rome Polytechnic University of Turin UNIVERSITY OF TURIN



Picosun Qy University of Tampere University of Turku



Norwegian University of Science and Technology



Universidad Politécnica de Valencia University of Oviedo The Technical University of Madrid University of Sao Paulo Universidad Politécnica de Madrid



KTH Royal Institute of Technology Chalmers University of Technology



University of Medicine in Lithuania Vilnius University

University Jagiellonian



University of Economics in Katowice University of Technology in Poznan Warsaw University of Life Sciences Technical University of Lodz Muzeum Lotnictwa Polskiego w Krakowie



Aalborg University



University of Studies Zagrabiensis

University of Liubliana

University College Dublin



Comenius University in Bratislava



University of Coimbra

-Africa-







International Water Resources and Environmental Engineering Institute -Oceania-

Monash Univeristy University of South Australia The University of New South Wales Griffith University University of Adelaide Queensland University of Technology Swinburne University of Technology University of Wollongong The University of Queensland University of Queensland University of Canberra Australian Catholic University



The University of Auckland

-NorthEast Asia-

Shanghai University Shanghai Jiao Tong University Shanghai University Of Electric Power Shanghai medical sciences university Dalian University Of Technology Shandong University National Sun Yat-sen University Minzu University of China Central Academy Of Fine Arts, CAFA Central South University Renmin University of China China University of Petroleum (Huadong) University of Science and Technology of China Ocean University of China, OUC Tianjin University Peking University Beijing University of Technology Beijing HuiLongGuan Hospital Peking Union Medical College University of Science and Technology Beijing Beijing Normal University Beihang University Beijing Institute of Technology Peking University Health Science Center Northwestern Polytechnical University Xi'an Jiaotong University Southeast University Wuhan University Nanjing University Harbin Institute of Technology

Qingdao University of Science and Technology Huazhong University of Science and Technology South China University of Technology Chinese Consortium for Higher Nursing Education

Chongging University, CQU The University of Hong Kong The Chinese University of Hong Kong City University of Hong Kong Hong Kong Baptist University The Education University of Hong Kong The Hong Kong Polytechnic University Hong Kong Shue Yan University Zhejiang University Hainan University Tsinghua University Fudan University Arup Group Limited Xiamen University Fuzhou University Lanzhou University Nankai University Sichuan University Jilin University Tongji University

Academia Sinica Fjitsu taiwan Aecom wan corporation World Vegetable Center National Synchrotron Radiation Research Center National Quemoy University CarboJan industral Consortium for Study Abroad in Taiwan, European Chamber of Commerce Taiwan Fulbright Taiwan Chungnam National University Ewha Womans University SEJONG UNIVERSITY INHA University Jeonbuk National University HANYANG UNIVERSITY Dongguk University Korea University

Kyushu Institute of Technology Mie University Chiba University Chiba Institute of Technology Osaka Universitv Osaka City University Osaka Prefecture University Yamagata University Japan Advanced Institute of Science and Technology Institute of Physical and Chemical Research The University of. Kitakyushu Hokkaido University **Ritsumeikan University** Rikkvo Universitv International Design Center Nagova Japan Aerospace Exploration Agency Waseda University Kyoto University Kvoto Pharmaceutical University Nara Institute of Science and Technology **Okayama University** Tohoku University

Chung-Ang University Chonnam National University Pusan National University JeJu National University Seoul National University Yonsei University yung Hee University Korea Advanced Institute of Science and Technology Pohang University of Science and Technology

> The University of Tokyo Tokyo Institute of Technology Kindai University Kanazawa University Kanazawa Institute of Technology Nagasaki University University of Mivazaki Kobe University Kanagawa University National Institute for Materials Science, NIMS National Museum of Japanese History Kagoshima University Saitama University University of Tsukuba Ehime University Niigata University Niigata Sangyo University Hiroshima University Keio University Yokohama National University Ryukoku University Kansai University Kwansei Gakuin University



-West Asia-



Inonu University Ankara Üniversitesi Hacettepe University Koç Üniversitesi Gazi University Boğaziçi Üniversitesi Sabanci University İhsan Doğramacı Bilkent University Sabanci University

Middle East Technical University



Israel Institute of Technology



Abadan Institute of Technology

-North Asia-



莫斯科外交學院國立莫斯科航空技術大學 俄羅斯科學院 托木斯科無線電子與控制系統大學 Moscow State University Khristianovich Institute of Theoretical and Applied Mechanics St Petersburg State University Khristianovich Institute of Theoretical and Applied Mechanics

-South Asia-



Veltech Dr. RR & DR. SR University Indian Institute of Technology Bombay Indian Institutes Of Science Education And Research (iisers)- Tirupati Rajagiri College of Social Sciences(RCSS) SRM University Vellore Institute of Technology Shoolini University Sathyabama Institute of Science and Technology IIM Bodh Gaya Hindustan Institute of Technology & Science (HITS)

-SouthEast Asia-



National University of Singapore Nanyang Technological University Singapore Management University Singapore University of Technology and Design

Han Chiang University College of Communication

Riam Institute of Technology

Southern University College

Universiti Malaysia Sabah

Universiti Sains Malaysia

Universiti Putra Malaysia

New Era University College

Asian Institute of Technology

Chulalongkorn University

Mahidol University

Universiti Malava

Institut Sinaran

Universiti Teknologi Malaysia

Tan Chong International Limited

Universiti Tunku Abdul Rahman

Philippine Institute of Volcanology and Seismology American University of the Philippines University of the Philippines Diliman Mapúa Institute of Technology De La Salle University Malaysia Aquaculture Development Association(MADA)

Bach Mai Hospital



Hanoi University of Mining and Geology Hanoi University of Science & Technology Can Tho University Vietnam National University, Ho Chi Minh City Ho Chi Minh City University of Technology Ho Chi Minh City University of Technology and Education Ho Chi Minh City Medicine and Pharmacy University Ton Duc Thang University Da Nang University of Technology VIETNAM ACADEMY OF SOCIAL SCIENCES College of Sciences Hue City, Vietnam Hue University Hue University of Education

Rajamangala University of Technology Isan Suranaree university of technology Thammasat University Prince of Songkla University Kasetsart University Chiang Mai University Panyapiwat Institute of Management, PIM Silpakorn University **Burapha University**



King Abdullah University of Science and Technology (KAUST) King Mongkut's Institute of Tehnology Ladkrabang Khon Kaen University Royal University of Phnom Penh **BELTEI International University** Sahakum Newton Thilay Group Co., Ltd

Antasari State Islamic University Banjarmasin Insan Cendikia Medika

Sekolah Tinggi Ilmu Keperawatan (PPNI) Jawa Barat Sekolah Tinggi Ilmu Kesehatan (STIKES) Husada Mandiri Poso

Sekolah Tinggi Ilmu Kesehatan (STIKES) Panakkukang Makassar



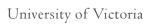
Sekolah Tinggi Ilmu Kesehatan (STIKES) Sint Carolus. Sekolah Tinggi Ilmu Kesehatan Bali (STIKES Bali) Sunan Kalijaga State Islamic University Yogyakarta Tanawali Persada School of Health Sciences Universitas Klabat Universitas Sariputra Indonesia Tomohon Universitas Sebelas Maret University of Jember Universitas Gadiah Mada Universitas Katolik Indonesia Atma Jaya Universitas Muhammadiyah Yogyakarta University of Brawijaya University of Indonesia The Association of Indonesia Nursing Education Center, AINEC Airlangga University Universitas Pembangunan Nasional "Veteran" Jawa Timur Institut Teknologi Sepuluh Nopember, ITS Universitas Muhammadiyah Surakata Universitas Diponegoro Udayana University Maranatha Christian University Bandung Sriwijaya University Muhammadiyah University of Purwokerto Bandung Institute of Technology Muhammadiyah Union University (24 sekolah) Universitas Jenderal Soedirma

2021 Dual Degree Partner



-North America-

Case Western Reserve University Temple University University of Illinois at Urbana-Champaign University of North Texas Texas Tech University University at Buffalo, SUNY University at Buffalo, SUNY Korea Polytechnic Institute of New York University Southern Illinois University at Carbondale University of Houston The University of Texas at San Antonio University of California, San Diego Purdue University



2021 Dual Degree Partner



-Europe-KTH Royal Institute of Technology University of Sheffield

University of Manchester University of Leeds (2)University of Lancaster University of Southampton University of Essex

University of Milan

IPSA

Ecole de Management de Normandie ESC Rennes School of Business IPAG



Brandenburg University of Technology Cottbus



Catholic University of Leuven

2021 Dual Degree Partner



-Oceania-



University of Queensland Swinburne University of Technology



University of Brawjiaya Institut Teknologi Sepuluh Nopember Universitas Atma Jaya Yogyakarta Sriwijaya University Diponegoro University Universitas Kristen Maranatha Maranatha Christian University

-Northeast Asia-



Xi'an Jiaotong University



Niigata University Hokkaido University

Jeju National University

-Southeast Asia-

MahidolUniversity King Mongkut's Institute of Technology Ladkrabang

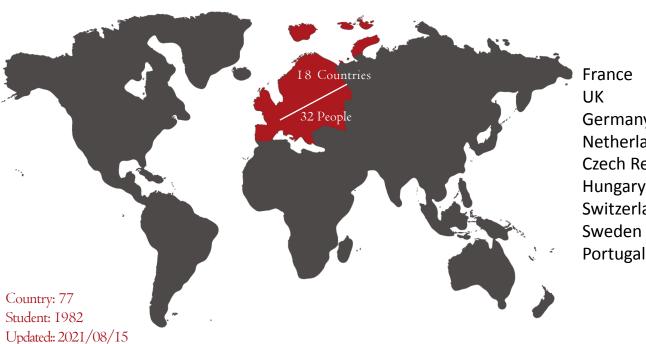
University of Malaya Sabah Tshung Tsin Secondary School G Southern University College Han Chiang University College of Communication New Era University College Riam Institute of Technology



-Asia-

Indonesia 345 Vietnam 221 Malaysia 428 Hong Kong 159 Macao 122 India 93 Thailand 92 31 Japan Philippines 33 Korea 13 Mongolia 14 Pakistan 11 Turkey 7

China 167 6 Iran Bengal 6 Myanmar 23 Nepal 1 Singapore 3 Jordan 2 Kazakhstan 1 Sri Lanka 1 Yemen 2 Russia 7 Cambodia 2



-Europe-

nce	7	Belgium	1
	2	Poland	2
many	2	Serbia	2
herlands	2	Italy	1
ch Republic 1		Spain	3
ngary	1	Slovakia	1
tzerland	1	Estonia	1
eden	1	Ireland	1
tugal	2	Austria	1







-N. America-

America	16
Canada	3
Haiti	10
Honduras	13
Belize	18
El Salvador	6
Guatemala	4
Nicaragua	9
St. Lucia	8
Mexico	3
Dominaca	1
St. Vincent and Grenadine	s 3



The leader of SATU International Secretariat





-Member Universities-



一一教學研究成果——

Achievements

2018

Asian Scientist



Jenny Huey-Jen Su

—Leadership—

Х

Michael Ming-Chiao Lai

-Biomedical Sciences-



First Taiwanese Researcher to Receive OIE Meritorious Award: NCKU Professor Chu-Fang Lo Wins for the Global Shrimp Industry

For decades, NCKU chair professor Dr. Grace Chu-Fang Lo has been studying the white spot syndrome virus (WSSV), which causes an extremely lethal disease in shrimp. In recent years, she has also been researching acute hepatopancreatic necrosis disease (AHPND). She has thus had a profound impact on global research and practices involving shrimp farming. In recognition of her lifetime contributions, the World Organisation for Animal Health (originally the Office International des Epizooties, OIE) is presenting her with the 2020 Meritorious Award, thereby making Prof. Lo the first researcher in Taiwan to receive this honor.

Outstanding Research

Biosensors & Bioelectronics

Dept. of Materials Science and Engineering / Assistant Prof. Chun-Yen Liu 3D printed microfluidic devices for circulating tumor cells (CTCs) isolation

Journal of Medical Internet Research

Dept. of Physical Education/ Associate Prof. Hsueh Wen Chow

Accuracy of optical heart rate sensing technology in wearable fitness trackers for young and older adults: Validation and comparison study



Dept. of Materials Science and Engineering / Distinguished Prof. Masahiro Yoshimura

A composite film prepared from titanium carbide Ti3C2Tx (MXene) and gold nanoparticles for voltammetric determination of uric acid and folic acid







Outstanding Research



Dept. of Life Sciences / Assistant Prof. Chen, I-Ching

Biodiversity redistribution under climate change: impacts on ecosystems and human well-being



Dept. of Electrical Engineering / Prof. Wu, Wei-Sheng

The rules for piRNA targeting reveal resistance of endogenous genes to piRNA silencing in C. elegans



Dept. of Physics / Prof. Chen, Tse-Ming All-electric all-semiconductor spin field-effect transistor







Outstanding Research



Inst. of Basic Medical Sciences / Chair Prof. Hsu, Kuei-Sen

Oxytocin stimulates hippocampal neurogenesis via oxytocin receptor expressed in CA3 pyramidal neurons





Inst. of Tropical Plant Sciences / Associate Prof. Tsai, Wen-Chieh

The Apostasia genome and the evolution of orchids



Outstanding Research

[The 18th Y. Z. Hsu Scientific Paper Award] Special Issue

Department of Physics, National Cheng Kung University/ Jan-Chi Yang, Assistant Prof

Deterministic optical control of room temperature multiferroicity in BiFeO3 thin films

[2019 MOE Yushan Young Scholars Program **]** Special Issue

Department of Photonics, College of Sciences, National Cheng Kung University/ Pin Chieh Wu Associate Prof.

Nanophotonic Metasurface Optics for Comprehensive Control of Light Property and Application





Outstanding Research

[Most Young Scholars Grant - Einstein Program] Special Issue

Department of Materials Science and Engineering ,National Cheng Kung University/ Sheng-Heng Chung Assistant Professor

Material Design and Performance Investigation for Developing Advanced High-Energy-Density Rechargeable Batteries



Department of Materials Science and Engineering ,National Cheng Kung University/ Yu-Ze Chen Assistant Professor



Synthesis of 2D Materials and Related Application





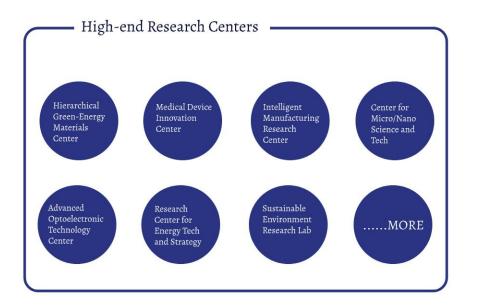
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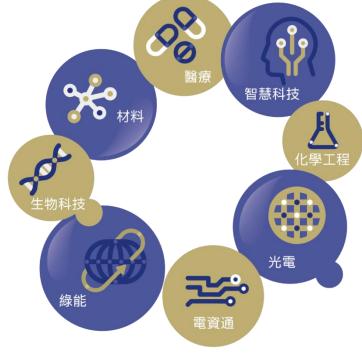
Distinguishing Features





High-end technology research NCKU is a comprehensive university, suitable for interdisciplinary or interdepartment research.









International Networking

Corporate-NCKU R&D Center





Distribution/Mfg Partnership

Technology Matching

College X

Ba

Sold State

X 858944

─ 「Innovative Education」、
「Life Experience」 & 「Vision」
Practice」 —



Why: the reason we initiate College X?

National Cheng-Kung University aims at educating next generation talents solving future problem. College X is a new initiative supporting the current









KnowLedge

The learning commons of the NCKU Library (named it "KnowLEDGE") is a "new place for learning", located on the first and second floor of the Dormitory No.3 of the University's Ching-Yeh Campus(MAP). As a campus hub for student-centered learning activities, this venue is a shared or common space in which NCKU students, teachers and others can come together to interact, and participate in various kinds of learning activities held there. The KnowLEDGE, as a new venue for knowledge construction, its space functions are listed in the following:

Service for NCKU faculty, students and staff to encourage them to engage in a dialogue, discussion and creative learning. Service for campus activities approved by NCKU Library to build a cross-over platform for interdisciplinary learning. Respond the students' needs for self-study, to set up a quiet reading room on 2nd floor. The Most Eco-friendly Building In The world — Green Fantasy Building—

THE MAGIC SCHOOL

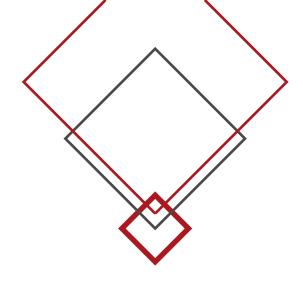
College of Planning and Design National Cheng Kung University

國立成功大學規劃與設計學



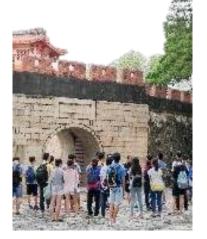
Magic School of Green Technologies

"Magic School of Green Technologies" is 43kWh/(m2.yr) and the percentage of energy saved is 65% (compared to 125kWh/(m2.yr), the annul EUI of office buildings of the same scale). It is the greenest building in the world. NCKU took another step toward the ideal of "zero carbon" by offering 4.7 hectares of green areas inside the campus to create a subtropical rainforest, which can deal with 71.3 tons of emitted CO2. As a result, the "Magic School of Green Technologies" has become a real "zero carbon green building".



EXPLORING TAINAN













NCKU USR Resource Center Operation

University Social Responsibility Practice Plan









Plain Area







Urbanized Area



Mountains









——各院亮點—

Achievements



College of Liberal arts



Our Visiting Specialist Dr. Joshua Sofaer, from UK, is an established artist who has planned various participatory workshops and artistic works all over the world. The three-month visit, through field researches, interviews, and workshops, achieved great results in connecting more local participants and to facilitate more in-depth and long-term cooperation in the future.

Interdisciplinary and international collaborations: Folk and contemporary arts



Department of Taiwanese Literature cooperated with Vietnam's Academy of Social Sciences to translate and publish the book "Vietnamese Modern Literature" (bilingual edition in Taiwanese and Chinese). Michael Hsiao, the senior advisor to president wrote a preface for the book. In addition, he attended the new book launch in TAEF.

Vietnamese Modern Literature was published in Taiwanese and Chinese



College of Science

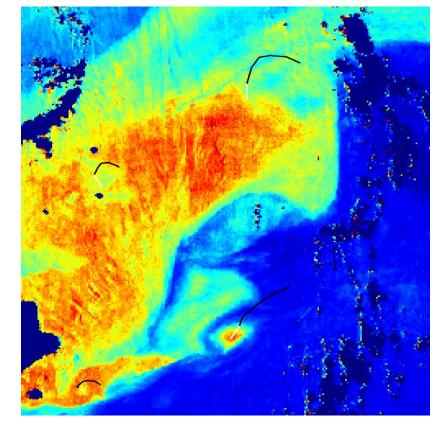
Utilize the expertise of faculty member to implement the social responsibility of NCKU



In response to the new education policy (108 syllabus), a training camp for Earth science teachers of senior high schools was held to allow them to understand the latest development in the field of Earth sciences. In addition to learning new knowledge, high school teachers can have the inspiration and teaching materials to conduct their courses.

In order to extend Earth science education, department faculty went to villages to carry out disaster prevention education for villagers. Some department professors were invited to participate in national popular science lectures. We also utilized our department museum to extend Earth science education to high schools and the general public.

Held a national training camp for high school Earth science teachers Interdisciplinary cooperation - extend the popularization of Earth science



"Calibration, Validation and Application of Geostationary Ocean Color Satellite" is a multiyear research project funded by the Ministry of Science and Technology of Taiwan. One scientific paper authored by Professor Cheng-Chien Liu of the Dept. of Geoscience has just been accepted by IEEE Geoscience and Remote Sensing Magazine (Remote Sensing category 1/30, Impact factor = 13). A new service based on this paper will be provided on line by the Open Access Satellite Imagery System supported by National Academy of Marine Research.

Department of Earth Sciences, NCKU/ Global Earth Observation and Data Analysis Center (GEODAC)

Liu, C.-C. (2021). "Deriving Ocean Surface Currents: A Method Using Geostationary Ocean Color Imager Hourly Data." IEEE

Pathlines and streamlines services derived from hourly imagery acquired by Geostationary Ocean Color Imagery



College of Management



Global Immersion Course is a an intensive teaching program with the integration of business practicum and theories cross-culturally and cross-disciplinarily. After the training of GIS, we expect students may acquire the core competency to work in the future world of cross cultures, borders and disciplines with the facilitation of the basic training and knowledge in GIC. The theme of GIC would renew accordingly as the cooperated enterprise may vary annually. In 2019 Fall Semester, GIC cooperated with *Tian*-*I Pharmaceutical Company* to discuss on the topic of *From* East to West on Marketing Chinese Herbal Medicines Internationally. In 2020 Spring Semester, GIC cooperates with NCKU's Exploring Tainan Program to discover the possibilities how Tainan traditional enterprise can transform business model in order to thrive in face of challenges in the 21st century.

2020 Spring Global Immersion Course



Virtual courses on International Entrepreneurship for Global Challenge: Empowering Tomorrow's Innovators.

NCKU International Summer School is organized with the attempt to enhance the international influence of *College of Management, NCKU*. The first summer school will start in 2020 in hope to strengthen the connection and cooperation with NCKU's partner colleges.

The 2020 NCKU International Summer School places its focus on the entrepreneurship training of sustainable development. We encourage the participants to brainstorm on the enterprise green transformation and elevate students' innovation to face global challenges of sustainable development. The core curriculum content would be how to construct effective and sustainable management model and methods for social enterprises in face of global environmental changes.

We also expect closer cooperation between NCKU and partnered schools in the coming future.

Video: CLICK HERE

2020 NCKU International Summer School



College of Engineering

FLOOD DISASTER IN KYUSHU, JAPAN

Occurred: July 4, 2020. Cause of heavy rains that causing rivers to overflow Death: S2 residents Missing: 11 residents

Impact:

- Access roads and houses were cut off due to flooding and washed away a bridge.
- Extreme torrential rain with lightning is coming down in the Kyushu region, rain is causing the durability of fragile soils. Most likely there will be a landslide, without the need for rain again

Emergency Phase:

- Announced as the fifth or highest level of emergency level
 The evacuation was carried out in a fitness center equipped with masks,
- disinfectants and thermometers to prevent the spread of COVID-19.
 Check the body temperature of all flood victims when they arrive at the
- Check the body temperature of an indoor victims when they arrive at the evacuation site
- Ask them to wash their hands often
- Always keep distance from others
- Volunteers are being restricted to their own prefecture to reduce the spread of Covid-19



2020-08-10 13:02:21

Kyoto University is the organizer of the International Program on Resilient Society Development under Changing Climate (RSDC Program). The goal of this program is to build a resilient social system by creating a disaster prevention educational platform for the countries in south-eastern Asia suffering from disasters caused by climate change. Besides Japan, the members include Cambodia, Laos, Myanmar, Taiwan, Thailand and Vietnam. Kyoto University conducts an intensive summer program every year. Our department has participated proactively since 2014. In 2020, it became online program due to Covid-19. There were two students from International Master Program on Natural Hazards Mitigation and Management joined the 2020 RSDC program.

Kyoto University RSDC Program

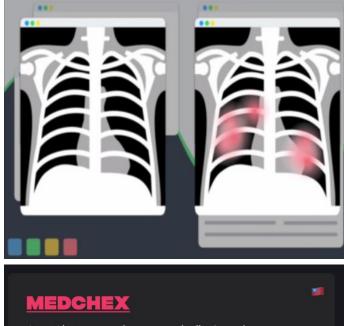


In order to closely link the academic cooperation between the two sides, the successful university and Germany's topranking technical university (Technische Universität Darmstadt), under the long-term friendly foundation, set up an Asian office in Chengdu and have Germany. The residence of scholars has become the first example of a German university stationed in Taiwan. It shows that the successful university is the focus of the Asian region. The two sides expect to jointly start exchanges of academic, scientific research and culture in this year.

A Solid and Trusting Partnership – Opening of TU Darmstadt's Liaison Office at NCKU, the First German University Center in Taiwan



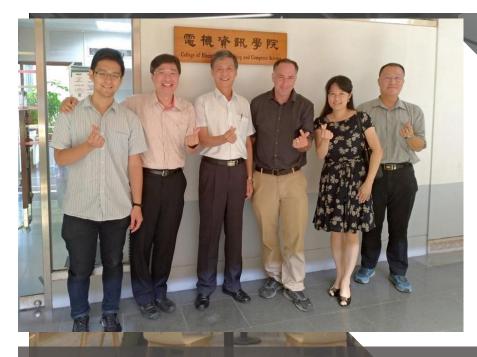
College of Electrical Engineering & Computer Science



An e-Alert system for automatically detecting pneumonia from chest x-rays

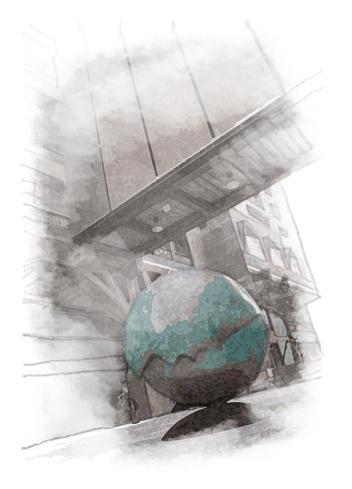
Artificial Intelligence (AI) is the distinguishing feature of the Department of Computer Science and Information Engineering. The department has established the Master's Degree Program on Artificial Intelligence Engineering as well as the Continuing Graduate Program in Artificial Intelligence and Information System. With the outbreak of COVID-19 worldwide, the team MedCheX, composed of NCKU researchers, used AI technology to develop a pneumonia detection system and was honored in the health category of the online COVID-19 Global Hackathon. MedCheX employed machine learning to design a model that can automatically detect the presence of pneumonia with up to 92% accuracy, and was selected as one of the 89 highlighted projects out of 1,560 teams around the world, which is the only team from Taiwan.

NCKU develops automatic pneumonia detection system for detection of COVID-19 patients and wins "Build for COVID19 Global Online Hackathon"



In order to closely link the academic cooperation between the United States and Taiwan, professors at Stanford University and National Cheng Kung University initiate international research cooperation and establish a research team, focusing on developing AIOT lighting systems for circadian rhythm regulation and concentration improvement. Both sides conduct academic, scientific research and cultural exchanges through short-term teaching, research resource sharing, and practical experience sharing, as well as exploring and analyzing circadian rhythm and attention issues from different angles, in order to further improve the research quality and innovation of sleep medicine in Taiwan.

Stanford U. and NCKU Transnational Research Team: AIOT Lighting Systems for Circadian Rhythm Regulation and Concentration Improvement



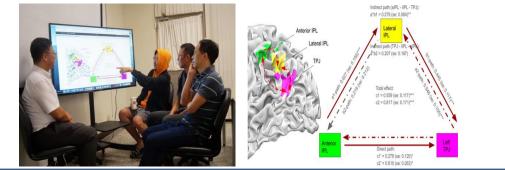
College of Social Science



In order to closely link the academic cooperation between the two sides, the successful university and Germany's topranking technical university (Technische Universität Darmstadt), under the long-term friendly foundation, set up an Asian office in Chengdu and have Germany. The residence of scholars has become the first example of a German university stationed in Taiwan. It shows that the successful university is the focus of the Asian region. The two sides expect to jointly start exchanges of academic, scientific research and culture in this year.

A Solid and Trusting Partnership – Opening of TU Darmstadt's Liaison Office at NCKU, the First German University Center in Taiwan





study was published in Scientific Reports, a sub-field journal of Nature Professor Chun-Chia Kung(Psych), Professor Der-You Chen(Psych), and Professor Ming-Hung Weng(Econ)in NCKU, have been collaborating since 2016. The team has trained talented students from various disciplines to jointly study social brain function. And the communication between the "temporal parietal junction (TPJ, pink)" (responsible for reasoning others' thinking) and the "left anterior inferior parietal lobule(I-alPL, green) "(responsible for caring about one's own values). The study analyzed the shopping habits of 30 college couples, and found that both male and female participants were equally concerned about the other half, and adjusting their own purchase intentions according to the opinions of significant others. The study showed that the sandwiched "left lateral inferior parietal cortex (I-IIPL, yellow)", mediates two adjacent brain regions (respectively concerns for self and for the other), to reach inter-personal harmony.



College of Planning & Design



英文字說明

Aim to fulfill the rehabilitation demands in an aging society, the team form by Industrial Design students develop an "Intelligent Health Promotion Service System", winning a million venture fund and a silver medal from the Longterm Award. The Service System provides a rehab set with characteristic of intelligence, gamification, and customization, which allows an effective and interesting remote rehab option.

Winning a million venture fund from The 3rd Longterm Award



2020 ICID Achievements:

1. ICID has signed a contract of collaboration project with Surreal and VAR Live, and joined NCKU USR Project to use Interaction Design to enhance the elders in the community to exercise more.

2. ICID Chairman Prof. Liou has received subsides from VW Foundation from Germany since 2017, continuously leading students to collaborate with international teams from USA, Germany, Hong Kong to conduct senior and aging-related academic research projects.

3. Prof. Liou and Asso. Prof. Yang co-held the 2020 ICCC (International Conference of Culture and Creativity), during the two forums in Tainan and Taipei, experts from different disciplines discussed the relations between design thinking and liberal arts, social innovation, design education and entrepreneurship practice.

4. ICID Asso. Prof. Cho and his team combined digital and humanities and used artistic creation to brilliantly translate the bold vitality of New York City, winning the gold medal of the 14th International Design awards and 2021 A'Design Award and Competition.

2020 ICID Achievements:

Collaboration project with Surreal and VAR Live < International academic research projects from VW Project < Prof. Liou and Prof. Yang co-held ICCC < Prof. Cho won the gold medal of 14th IDA and 2021 A' Design Award and Competition.





The fish and shrimp development of NCKU underwater biology (Life Below water) is focused on the Impact Rankings 2020 published by THE (Times Higher Education) this year.

The United Nations Sustainable Development Goal (SDG) 14 underwater creatures (Life Below Water) ranked 14th in the world and first in Asia.

The department of Biotechnology and Bioindustry has invested in related researches on shrimps, zebra fish and microalgae for a long time, and has made significant contributions to the United Nations Sustainable development Goal SDG14.

Life Below Water Field Ranked 14th in the world, first in Asia

Overseas Education Program



Ten teachers and students from Texas A&M University in the United States visited NCKU on January 6, 2020 for one-week short-term intensive course in winter vacation. "Texas A&M University Overseas Education Program: Taiwan-Marine Mammal Anatomy" by our school (College of Bioscience and biotechnology). The Department of Life Sciences and the Marine Biology& Cetacean Research Center are jointly responsible for teaching. The course content is mainly marine mammals that included cetacean introduction, anatomy, skin ester sampling, internal organ inspection, bone practice, etc. The college actively communicates with international schools and establishes an international learning environment. Since 2018, it has signed an academic exchange cooperation agreement (MOU) with Texas A&M University in the United States to conduct research cooperation, exchange students, and jointly open summer/winter courses. We expect more international exchanges and research cooperation projects.





College of Medical







As the epidemic situation is still severe, in order to encourage international students to stay on campus during the summer vacation and reduce the risk of infection when flying back and forth, our college provided a summer research program scholarship for the international students. A total of 26 master and doctoral students applied this program. The students needed to record a 3-minute report video to present about their summer research. Each student received a stipend of NTD10,000.

International students summer research program



In order to enhance and stimulate collaboration of our faculty with other hospital clinicians, the College of Medicine signed MOUs with several hospitals including Ditmanson Medical Foundation Chia-Yi Christian Hospital, Kaohsiung Veterans General Hospital, Tainan Municipal An-nan Hospital, Kaohsiung Municipal Gangshan Hospital, Ministry of Health and Welfare Tainan Hospital, and Chiayi Chang Gung Memorial Hospital in 2020. The College of Medicine is now planning to run some online courses to provide new knowledge of translational medicine and promote the overall improvement for the southern Taiwan's medical care.

Establish Southern Medical Alliance



Miin Wu School of Computing



National Cheng Kung University (NCKU) and National Institute of Technology, Kagawa College (NITKC) have signed an academic exchange MoU to jointly develop student exchange program, faculty visiting program, teaching and lab program, research and technology development program, and other related activities. Several programs are in the process. Joint curriculums will be open to students in fall 2021. Collaboration degree transfer program, practical curriculums of robotics and internship will be ready for students soon.

Arranging the collaboration between NCKU and NITKC



2020 Workshop on Future Computing invited experts and leaders from academia, industry, and the public sector to share, elaborate, and discuss critical issues, developments, breakthroughs and new perspectives in future computing, including theories, methodologies, architectures, systems, applications, social implications, etc. The annual WFC is organized by Miin Wu School of Computing (SOC), NCKU, and the 1st WFC was held in 2019 and very well received by attendees. Topics of the WFC20 include computing architecture, high-performance & memorycentric computing, AI robotics, computational biomedicine, AI-assisted healthcare, AI and intelligent mobility, splendid AI applications, and visions on future computing.

2020 Workshop on Future Computing



一一成大焦點——

Spotlight





NCKU, BOSCH Strengthen Strategic Collaboration on Big Data, IoT

The National Cheng Kung University and Bosch Taiwan deepened the existing long-term collaboration through the NCKU-BOSCH MoU signing and themed discussion on December 12th, 2020, focusing on advanced technologies including Big Data, IoT, Machine Learning, and Smart Agriculture.





NCKU Overseas Week Promotes International Scientific Collaboration in Higher Education

National Cheng Kung University is holding the "NCKU Overseas Week" to enclose the fruitful results of regional joint research projects, international talent cultivation, and academia-industry collaborations through research presentations and online forums respectively in Taiwan, Malaysia, Thailand, and Vietnam from November 16th to 20th. Along with its strategic partners, namely University of Malaya (UM), Mahidol University (MU), and University of Medicine and Pharmacy at Ho Chi Minh City (UMP), NCKU aims to tackle regional challenges and to find new solutions for dengue fever, biomass energy, prevention and treatment of serious diseases, energy storage systems, sustainable energy and materials, digital dentistry, pregnancy health care, wound care, and water security.NCKU President Huey-Jen Su in her opening message pointed out the critical supports from local partners for a successful cross-border education and pledged for collective efforts to make the betterment of our common land. NCKU Executive Vice President Ming-Derg Lai said that NCKU humbly hopes to elaborate the values of scientific findings through their utilization in solving community challenges, to conduct the spirit of higher education through guiding students to ponder their future mission when participating in these projects, and to benefit the people in our communities through team work with our domestic and international partners.





NCKU-Butterfly Program to cultivate talent with international enterprises

On December 24th 2019, Delta Electronics (Thailand) Public Co., Ltd. (DET) signed a memorandum of understanding (MOU) with National Cheng Kung University to recruit Thai and Indian students and to cultivate international talent. The NCKU-Butterfly Program provides a diversified talent-cultivating platform for industry-academia cooperation and a solid support for the development of international enterprises.





NCKU Formula Racing 2020 Outlook

Three college boys used to dream about building an electric car. Since their dormitory days at NCKU, the trio have come a long way. They were persistent in the pursuit of their dream and managed to draw 30 like-minded classmates into joining their team "NCKU Formula Students" in the Formula SAE competition that was held in Shizuoka, Japan in September 2019. After the competition, the team returned to Taiwan and joined forces with NCKU's department of mechanical engineering student-formed racing team "NCKUME Racing" to form the "NCKU Formula Racing" team, which currently has 55 members strong. The newly formed team will endeavor to reach new heights in the 2020 competition.





TU Darmstadt Asia Office @ NCKU Celebrates 1st Anniversary

National Cheng Kung University (NCKU), Taiwan and the Technische Universität Darmstadt (TUDa), Germany jointly hosted a 1-Year– Celebration of the TU Darmstadt Asia Office @ NCKU through a two-day event. On May 7th, the NCKU-TUDa-Bosch Joint Workshop mapped out a study program combining exchange at the partner university and an internship at Bosch in Taipei, all made possible by a scholarship program; and on the other hand stimulated scientific cooperation and its applications in advanced industry. On May 8th, NCKU, TUDa and the German Academic Exchange Service (DAAD) together explored possibilities and funding for faculty's research plans and students' overseas study. Exchange students from TUDa to NCKU also shared their learning and living experiences in Tainan by poster presentations and answered many questions by NCKU students who are interested in an exchange semester at TUDa. The 1-Year–Celebration not only overviewed the long-term exchange over 30-plus years between the two universities, but also solidly advanced future projects, reflecting NCKU's pragmatic methodology toward international education and cooperation.

THANK YOU

http://web.ncku.edu.tw/bin/home.php