

NTU

2017 2018

NTU HANDBOOK





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NTU AT A GLANCE

The year 2018 marks the 90^{th} anniversary of the founding of National Taiwan University (NTU).

All 4 elected ROC presidents are NTU alumni.

NTU is ranked among the world's top 50 in all five subject areas featured in the QS World University Rankings by Subject.

NTU has partnered with over 550 universities worldwide.

The year 2018 marks the 90th anniversary of the founding of National Taiwan University (NTU) and the beginnings of higher education in Taiwan. Originally established as Taipei Imperial University (TIU), NTU has evolved into a comprehensive institution that occupies the largest campus and covers the widest array of disciplines and domains in Taiwan. For 90 years, NTU faculty and students have spared no effort in pushing for academic excellence, pioneering Taiwanese history, and progressing our nurturing island.

Access to more resources entails greater responsibility. NTU's motto "Integrity, Diligence, Fidelity, and Compassion" remains a clear statement of the core and relevant values we embrace in the cultivation of talented individuals. All four elected ROC presidents are NTU alumni, and NTU is ranked the world's top 50 in all five subject areas featured in the QS World University Rankings by Subject 2017. Currently, NTU has partnered with over 550 universities worldwide, and its academic excellence is recognized within and without the Chinese-speaking world. Facing a rapidly changing environment both domestically and internationally, it is the responsibility of NTU and all its members to take the initiative in responding to social concerns and expectations.

NTU faculty and students have not only made theoretical suggestions and critiques on national development strategies, but have also established social enterprises dedicated to fostering public welfare and environmental

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protection. In addition, NTU is open to everyone around the world. Established in 2009, NTU's OpenCourseWare (OCW) has since provided more than 200 online courses and won the Outstanding Site and Educator Award from the Open Education Consortium (OEC). In 2013, NTU joined Coursera, becoming the first university in Taiwan to take part in this international online teaching platform. Many of our Coursera offerings have become among the most popular Chinese-language massive open online courses (MOOCs). In 2015, NTU collaborated with National Taiwan Normal University (NTNU) and National Taiwan University of Science and Technology (NTUST) to form the NTU System to collaborate on a wide variety of projects, including cross-campus courses for NTU System attendees. By applying such state-of-the-art education, students have progressively been translating their innovations and dreams into practical reforms and changes in actual industry. A perfect example is the recent establishment of the Stanley Wang D-School@NTU, where Asian designers and innovators are inspired daily to develop lively, fresh, and creative thinking in pursuit of academic excellence. In this learning incubator, students creatively solve everyday problems for the benefit of society.

Former President Ssu-Nien Fu once called on all NTU members to "dedicate the University to the Spiritus Universalis." With this supreme goal in mind, NTU, rooted and cultivated in Taiwan, reaches out and seeks to be a university of the world. Upholding its core beliefs of heritage, innovation, excellence, and dedication, NTU advances steadily toward the goal of being the pinnacle academic institute in Asia and a world-leading university.

National Taiwan University

MILESTONES

1895

18 June: Taiwan Hospital becomes operational.

17 March:

1928

TIU founded. It initially consists of two divisions: the Faculty of Literature & Politics, and the Faculty of Science & Agriculture. In addition, the affiliated Technical College of Agriculture and Forestry (reinstituted as Taichung Senior School of Agriculture and Forestry in 1943) is established. Dr. Taira Shidehara is appointed the first president of TIU.



National Taiwan University, originally Taihoku Imperial University (TIU), was founded by the Japanese government in 1928. Following the ROC victory in the Second Sino-Japanese War in 1945, and Taiwan's retrocession, the ROC government took over the school, which was then reorganized and renamed: National Taiwan University (NTU). The university's roots, however, go back to 1895, when the Japanese established its predecessor: Taiwan Hospital, which later became NTU Hospital,

1949

January: Ssu-Nien Fu takes up the torch as the university's fourth president. (Both Fu Bell and Fu Garden are later built to commemorate President Fu.)

1993

May:

NTU becomes the first university in Taiwan to elect its own president and nominates Wei-Jao Chen as the university's 9th chief executive. Chen takes office in June.

August: Establishment of the College of Public Health.

2008

August: Establishment of the Schools of Dentistry and Veterinary Medicine.

1961

September: Highland Experimental Farm, an affiliated organization of the College of Agriculture, is established.

1997

March: NTU's first Azalea Festival.

August: Establishment of the College of Electrical Engineering (renamed the College of Electrical Engineering and Computer Science in 2000).

1999

1970

December:

The College of Agriculture

establishes the Xitou Forest

Recreation Area.

February: The University Affairs Meeting approves the planning of Yunlin Campus, and the Yunlin Campus Planning Committee is established

accordingly.

Establishment of the new College of Law, with departments formerly under the College of Law forming the College of Social Science.

2013

August: Establishment of the School of Pharmacy.

5 國立臺灣大學

in Dadaocheng, Taipei.

2009 October:

NTU is ranked 95th in the Times Higher Education World University Rankings, marking its entry into the top 100.

December:

Pei-Tsen Hall on Chupei Campus is completed to accommodate research activities in such fields as pharmacy, electrical engineering and computer science, biotechnology, and engineering.

1936

1943

Establishment of the Faculty of Medicine and the Medical College.

March:

The Faculty of Science & Agriculture is divided into two separate faculties: the Faculty of Science and the Faculty of Agriculture. May:

Establishment of the Faculty of Engineering.

15 November:

1945

On orders from the Executive Yuan, TIU is reorganized and renamed: National Taiwan University (NTU), with Tsung-Lo Lo serving as the first president. The university, including its affiliated hospital and farm, comprises six colleges: Liberal Arts, Science, Law, Medicine, Engineering, and Agriculture.

January:

1947

The Provincial College of Law and Commerce (originally Taihoku College of Commerce) is integrated into NTU. This includes the college campus and buildings on Xuzhou Road.



1982

November: The university emblem is introduced at the anniversary celebration.



2002

August: The College of Agriculture is renamed the College of Bio-resources and Agriculture.

August: Establishment of the

College of Life Science.

1986

NTU alumnus Yuan-Tseh Lee wins the Nobel Prize in Chemistry.

1987

August: Establishment of the College of Management.

March:

1988

The Student **Representatives Federation** is renamed the Student Association (with a president directly elected by the entire student body).

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2003

September:

NTU signs a memorandum of cooperation with Yonglin Healthcare Foundation to establish a hospital specializing in cancer treatment.

2007

November: Establishment of the NTU Museums Group.









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2015

January:

Establishment of the NTU Triangle Alliance between NTU, National Taiwan Normal University (NTNU), and National Taiwan University of Science and Technology (NTUST).

2016

March: Evolution of the NTU Triangle Alliance into the NTU System under the approval of the Ministry of Education. President Pan-Chyr Yang is elected NTU System's first president.



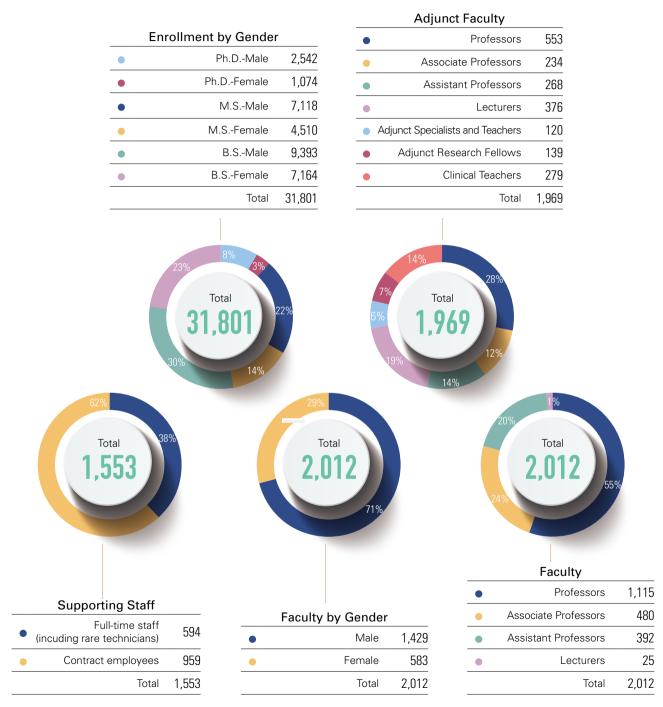
2017

March: NTU co-organizes the Taipei Azalea Festival with Taipei City Government.

April: NTU hosts the 2017 National Intercollegiate Athletic Games.



NTU TODAY



Organization

Major Administrative Directors

Interim President **Tei-Wei Kuo** Ph.D., University of Texas at Austin

Executive Vice President for Academics and Research **Tei-Wei Kuo** Ph.D., University of Texas at Austin Vice President for Academic Affairs Hung-Chi Kuo Ph.D., Colorado State University, USA

Vice President for Student Affairs Cheryl Chia-Hui Chen Ph.D., Yale University Ph.D., Complutense University of Madrid Secretary-General **Ta-Te Lin** Ph.D., Cornell University

Vice President for

International Affairs

Luisa Shu-Ying Chang

Executive Vice President for Administrative Affairs Ching-Ray Chang Ph.D., University of California, San Diego

Executive Vice President for Financial Affairs **Shu-Hsing Li** Ph.D., New York University Vice President for General Affairs Gen-Shuh Wang Ph.D., State University of New York

Vice President for Research and Development Fang-Jen Lee Ph.D., North Carolina State University

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國立臺灣大學

ADMINISTRATION

flice of Academic Affairs flice of Student Affairs flice of General Affairs flice of Research & evelopment

- Office of International Aff Office of Financial Affairs NTU Library
- Onice of the Secreta
- Auditing Department
- Accounting Departmer
- ersonnel Department
- Computer & Informa
- Metworking Cente
- NTU Press
- Center for Environmental
- Safety & Health

ACADEMIC

College of Liberal Arts

- Department of Chinese
 Literature
- Department of Foreign Languages & Literatures
- Department of History
- Department of Philosophy
- Department of Anthropology
 Department of Library &
- Information Science
- Department of Japanese
 Language & Literature
- Department of Drama & Theatre
- Institute of Art History
- Institute of Linguistics
- Institute of Musicology
- Institute of Taiwan Literature
- Program for Teaching Chinese as a Second Language
- Program in Translation and Interpretation
- Foreign Language Teaching
 & Resource Center
- Language Center

- College of Science
- Department of Mathematics
- Department of Physics
- Department of Chemistry
- Department of Geosciences
- Department of Psychology
- Department of Geography
- Department of Atmospheric Sciences
- Institute of Oceanography
- Institute of Astrophysics
 - Institute of Applied Physics
 - Institute of Applied
 Mathematical Sciences
 - International Degree
 Program in Climate
 - Change and Sustainable Development
- Global Change Research
 Center
 - Instrumentation Center

College of Social Sciences

- Department of Political Science
- Department of Economics
- Department of Sociology
- Department of Social Work
- Graduate Institute of
 National Development
- Graduate Institute of Journalism
- Graduate Institute of Public Affairs

College of Medicine

- Department of Medicine (includes 27 specialized departments)
- School of Nursing
- Department of Clinical Laboratory Sciences & Medical Biotechnology
- Department of Physical Therapy
- Department of Occupational Therapy
- Institute of Clinical Medicine
- Institute of Toxicology
- Institute of Biochemistry & Molecular Biology
- Institute of Immunology
- Institute of Oncology
- Institute of Medical Genomics and Proteomics
- Institute of Brain and Mind Sciences
- Institute of Medical Device and Imaging
- The Ph.D. Program for Translational
- GIP-TRIAD Master's Degree in Agro-Biomedical Science Medicine

- Institute of Biomedical Engineering (with the College of Engineering)
- Laboratory Animal Center
- NTU Cancer Center
- University Hospital, Cancer
 Center Hospital

School of Dentistry

- Department of Dentistry
- Institute of Oral Biology
- Institute of Clinical Dentistry

School of Pharmacy

- School of Pharmacy
- Institute of Clinical Pharmacy
- Drug Research Center



54 departments, 108 graduate institutes, 18 programs,

5 international research centers, 6 national-level research centers, and 48 university-level research centers

College of Engineering

- Department of Civil Engineering
- Department of Mechanical Engineering
- Department of Chemical Engineering
- Department of Engineering Science & Ocean Engineering
- Department of Materials
 Science & Engineering
- Institute of Environmental Engineering
- Institute of Applied Mechanics
- Institute of Building & Planning
- Institute of Industrial Engineering
- Institute of Biomedical Engineering (with the College of Medicine)
- Institute of Polymer Science & Engineering
- Ph.D. Program of Green
 Materials and Precision Devices
- TIGP-Molecular Science and Technology
- Yen Tjing Ling Industrial Research Institute
- Earthquake Engineering
 Research Center
- Hydrotech Research Institute (with the College of Bioresources and Agriculture)
- Manufacturing Automation
 Technology Research Center
- Ship Technology Research Center
- Petrochemical Industry Research Center
- Nano-Electro-Mechanical
 System Research Center
 (with the College of Electrical
 Engineering and Computer
 Science

College of Bio-Resources and Agriculture

- Department of Agronomy
- Department of
 Bioenvironmental Systems

Engineering

- Department of Agricultural Chemistry
- Department of Plant
 Pathology and Microbiology
- School of Forestry and Resource Conservation
- Department of Animal Science and Technology
- Department of Agricultural Economics
- Department of Horticulture
- and Landscape Architecture Department of Bio-industry Communication and
- Development

 Department of Bio-industrial
 Mechatronics Engineering
- Department of Entomology
- Institute of Food Science and Technology
- Institute of Biotechnology
- Mater Program for Plant
- Medicine
 - Agricultural Exhibition Hall
 - Committee Of Agricultural Extension
 - Education and Research
 Center for Bio-Industrial
 Automation
 - Hydrotech Research Institute (with the College of Engineering)
 - Experimental Forest
 Administration
- Veterinary Hospital
- Agricultural Experimental Farm
- Upland Experimental Farm

- School of Veterinary Medicine
- Department of Veterinary Medicine
 - Institute of Veterinary Clinical Science
 - Institute of Molecular and Comparative Pathobiology

College of Management

- Department of Business
 Administration
- Department of Accounting
- Department of Finance
- Department of International Business
- Department of Information
 Management
- Institute of Business Administration
- Global MBA
- NTU EMBA Studies
- NTU-Fudan EMBA
- Entrepreneurship and Innovation MBA

College of Public Health

- Department of Public Health
- Institute of Occupational Medicine & Industrial
- Hygiene
 - Institute of Environmental Health
 - Institute of Epidemiology
 and Preventive Medicine
 - Institute of Health Policy and Management
 - Institute of Health Behaviors and Community Sciences
 - Institute of Food Safety and Health
 - Master of Public Health
 Degree Program

College of Electrical Engineering & Computer Science

- Department of Electrical
 Engineering
- Department of Computer Science & Information Engineering
- Institute of Photonics & Optoelectronics
- Institute of Communication
 Engineering
- Institute of Electronics
 Engineering
- Institute of Networking & Multimedia
- Institute of Biomedical
 Electronics & Bioinformatics
- Data Science Degree Program
- Taiwan International Graduate
 Program on Bioinformatics
- Communication Research
 Center
- Nano Electro Mechanical System Research Center (with the College of Engineering)

College of Law

- Department of Law
- Institute of Interdisciplinary
 Legal Studies

College of Life Science

- Department of Life Science
- Department of Biochemical Science & Technology
- Institute of Plant Biology
- Institute of Molecular and Cellular Biology
- Institute of Ecology and Evolutionary Biology
- Institute of Fisheries Science
- Institute of Biochemical Sciences
- Genome and Systems
 Biology Degree Program

- Taiwan International Graduate
 Program in Interdisciplinary
 Neuroscience
- Institute of Fishery Biology
- Committee On Fisheries
 Extension

School of Professional Education & Continuing Studies

- Professional Master's Program in Business Administration
- Professional Master's
 Program of Law in Business
 Administration

Professional Master's

Center for General Education

Master's Program in Sport

Facility Management and

Department of Athletics

· Center for Population &

Center for Condensed

Center of Biotechnology

National Taiwan University

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Gender Studies

Matter Sciences

· Biodiversity Center

Master's Program in

Health Promotion

Center for Teacher

Education

Research Center

Management

Statistics

Program of Biotechnology

TEACHING EXCELLENCE

OPEN EDUCATION AND DIGITAL LEARNING

In response to the global trend towards open education and digital learning, NTU has been developing a wide array of open online courses. Since joining Coursera in 2013, NTU as Coursera's first and only partner in Taiwan has offered a total of 39 classes on the international online education platform. In particular, "Emperor Qin," "Probability," "The Red Chamber Dream," and "Shi-ji" have been among the most popular Chinese-taught MOOCs worldwide, attracting over 9 million views in total. NTU's OpenCourseWare (OCW) currently provides 219 online courses, totaling over 14 million views to date.





Flipped-classroom e-Professor training program

To encourage independent learning among students, the NTU faculty utilizes the e-Professor training program to implement "Blended Learning," a model that encourages students to effectuate learning via a hybrid digital/conventional course environment. Initially, this model was aimed at cornerstone courses to help students develop basic skills and expertise in such areas as composition, programming, calculus, linear algebra, statistics, engineering mathematics, and economics. In the future, it will be customized to meet the diverse needs of learners outside the university as well. By offering high-quality credit courses under the NTU brand, we are determined to help facilitate social education and lifelong learning.



Capstone practicum offered by the Department of Civil Engineering

CAPSTONE COURSES AND INTERDISCIPLINARY EXPERTISE

To improve outcome-based learning and professional education, we encourage each department to build a capstone module consisting of cornerstone, keystone, and capstone courses. These will allow students to better integrate their overall learning experience at NTU and also to sensibly apply acquired skills to career development. The collaboration between the Department of Civil Engineering and the NTU Experimental Forest, in which students designed the Gingko Bridge at Xitou, is a prime example of successful capstone modules.

We offer a variety of interdisciplinary courses in which students can fully explore their interests and potential as well as develop a multiplicity of skills. Currently, courses such as "Data Science and Social Inquiry" and "Journalism and Digital Story Telling" are just the tip of the iceberg of multidisciplinary courses to come. NTU will continue to develop interdisciplinary courses, whereby students can acquire the diversity in expertise to excel in current and future job markets.

DEVELOPING INTERNATIONAL COMPETITIVENESS

To enhance their competitiveness on the international stage, NTU is focused squarely on developing students' critical thinking, analytic and integrational skills, and effective verbal and textual communication. In 2015, we launched "Core Competencies Curriculum: Academic & Professional Communications," in which students acquire knowledge through lectures in large classes, and attend practice sessions in smaller ones. In the large classes, teachers would impart basic knowledge and skill sets using different materials and resources, while the smaller classes develop students' team-working and problem-solving abilities.

NTU also stresses the value of foreign language proficiency. In 2015, NTU was authorized by the University of Queensland in Australia to hold a Three Minute Thesis Competition (3MT) annually. This competition asks students from different nations and disciplines to describe their research and its significance, in plain English, in three minutes or less. The challenge has been enthusiastically embraced both in and out of NTU. 3MT not only motivates learning for participants but also propagates understanding across disciplinary and national borders.

DIVERSE COURSE OPTIONS OFFERED BY NTU SYSTEM

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NTU, NTNU (National Taiwan Normal University), and NTUST (National Taiwan University of Science and Technology) have collaborated to form the NTU System. These three neighboring institutes in the Daan District of Taipei are, respectively, the comprehensive, educational, and vocational cornerstones of Taiwanese higher learning. By combining their strengths, these three schools complement one another to provide an excellent environment for teaching, learning, and research. In order to provide students with a wide variety of flexible learning options, the three universities made 1,766 courses accessible to all NTU System attendees in 2017 and attracted over 2,895 students to take cross-campus courses.

BRAVO CAMPUS

A JOURNEY OF MARVEL AND FULFILLMENT

Launched in 2008, the NTU Freshman Orientation Camp is an event customized to greet and prepare incoming students for study and life at NTU. The camp differs from others in that it emphasizes learning rather than play while providing a variety of activities to welcome freshmen. In addition to providing orientation courses for freshmen, the camp also incorporates the NTU dormitory experience and evening courses into the program. All of this is designed to strengthen bonds among freshmen. After living and learning together for four days, these young people will embark smoothly on their journey of marvel and fulfillment at NTU.

UNDIMINISHED ENTHUSIASM ON CAMPUS

"Think of MacGyver and Iron Man," one of Hackathon Taiwan's founders, Fred Chien said. "Their stories tell us that when you face a problem, you have to tackle it using only the things at hand and within a time limit. This epitomizes Hackathon." In 2017, HackNTU drew 451 students and industrial professionals from Taiwan and abroad to its 43hour development competition. The 2017 HackNTU, with its twin themes of "data science" and "civil technology," promoted teamwork and encouraged participants to solve problems through practice. Each year, the HackNTU has challenged students "to think, to hack" while leading them on a path toward creativity and innovation.

Campus Recruitment Fair



Graduation Banquet on Royal Palm Boulevard

The NTU campus is known for its beautiful summer evenings. In 2017, the Graduation Banquet on Royal Palm Boulevard opened with 230 tables, and drew nearly 3,000 graduates. At this festive event, the graduates sampled delicacies, chatted, and took photos together merrily. The annual banquet offers a variety of shows, including live band music, popular dance, and Chinese cross-talks, making the evening enjoyable and memorable — a fitting commencement tribute to graduates.

THE ROAD FROM CAMPUS TO JOB MARKET

NTU students are encouraged to take internships in order to bridge the industry–academia gap, integrate knowledge and practice, and prepare themselves for the job market. Launched in 2015, the National Taiwan University Internship Program has initiated various projects both here and overseas. In addition to internships, the program also organizes activities wherein senior professionals and executives are invited to interact with students in person. NTU also hosts the Campus Recruitment Fair every March. This year, the fair had 408 corporate booths offering over 20,000 job opportunities. Moreover, 69 seminars and 18 corporate visits were organized to familiarize students and alumni with the job market and with career planning.



Social Devotion Special Award (Group): NTU Children of Sea Club



Social Devotion Special Award (Individual): Che-Wei Hsu

BENEFIT FROM SOCIETY, GIVE BACK TO SOCIETY

To serve both the local and international communities, NTU student clubs regularly send over 40 social service teams across Taiwan and abroad every winter and summer vacation. During the semester, more than 700 service-learning courses are offered to students who wish to engage in public service. Also, the Social Devotion Special Award and the Altruistic Award were established in 2013 to commend students who value social responsibility, care about the disadvantaged, and who wish to practice altruism.

The recipients of the 2016 Social Devotion Special Award were Che-Wei Hsu from the Graduate Institute of Building and Planning and the NTU Children of Sea Club. Hsu personally experienced the life of a homeless person while launching KIGE Studio, which developed a beneficial and sustainable model for house renovation. This studio not only provides homeless people with job opportunities, but also helps them find the meaning of life again. Founded in 1987, the NTU Children of Sea Club has always been committed to "long-term services," "island-wide services," and "reciprocal interactions." Students of this club have built a warm and solid relationship with residents at Chimei and Jibei on Penghu Island. Now, the club is looking forward to thriving for another 30 years!



LIVE AND LEARN TOGETHER

NTU has 26 dormitory buildings and a total of around 12,000 beds, serving as a second home to international and local students alike. Each dormitory building is allotted one or more counselors to guide and help students. In addition to featuring study and discussion rooms as well as gyms and dance studios, our spacious dormitories also provide the setting for a variety of living and learning projects. For example, there are now three living-learning centers for group discussion, and related freshmen courses are offered to enrich students' lives and to create a friendly, interactive environment.



Dormitory lobby



Student dormitory



Kitchenette

STUDENT INTERVIEWS



Yen-Ting Lin 3rd Year, Department of Law (President of NTU Student Association)

Taiwan

Just as the NTU Student Association initiated the campaign for a democratic Taiwan 30 years ago, NTU students today are continuing to demand that rights and interests be an important part of education. If freedom, democracy, and diversity are crucial values to Taiwan, and NTU has the qualities required of an excellent university, then we will be able to uphold our beliefs and venture on to try new possibilities!



Zhen-Hui Chai 4th Year, Department of Politics

Malaysia

Taiwan is very inclusive to people of diverse cultures. I have often heard that the most beautiful scenery in Taiwan is its population. This saying is known only to those who have lived or are living in Taiwan. People here embrace adversity with good nature, and work hard to overcome existing limitations and challenges.



Yi-Zhu Huang 2nd Year, Department of Economics

Brazil

I'm facing more challenges now after more than a year's study in Taiwan as an overseas Chinese student. The pressures and challenges I encounter in learning and daily life have all become important opportunities for me to develop my skills and independence. I have grown a lot both physically and intellectually in the past year. In the future, I will try to be more mature and independent and be more responsible for the decisions I make.



lyit Benusia 4th Year, Department of Physical Therapy

Indonesia

I'm currently the president of the International Student Information Service (ISIE) at National Taiwan University. College life wouldn't be complete without extracurricular activity. School still comes first for me, but doing something out of my comfort zone is as essential as academic achievement. The club that I joined is a club for local students helping international students, however it doesn't shut me down. It's a real challenge when I have to work with locals but I'm glad that everything is fine so far.



Yahya Namiq 3rd Year, Department of Civil Engineering

Iraq

I am Yahya, an international student of the Civil Engineering Department at NTU. I am in my junior year, starting my third year. I feel NTU gave me the opportunity to be a better person, and made me stronger at getting over challenges. Studying in Mandarin is not easy but it's a very important language in today's business world, and a big school like NTU will always nurture your knowledge and widen your horizons.



Student clubs in academic year 2016/2017

	academic	91
•	student government	82
	arts	75
•	comprehensive	66
	service	49
	networking	33
•	fitness	23
	recreational	15



5,193 International Students from 68 Countries

•	Asia	3,115
•	Europe	1,066
•	Americas	794
•	Oceania	198
•	Africa	20

GLOBAL NTU

NTU PARTNER DAY: BUILDING A SUSTAINABLE, INNOVATIVE INTERNATIONAL PLATFORM

In tandem with the 2017 Asia-Pacific Association for International Education (APAIE) Conference, the Office of International Affairs (OIA) organized Partner Day 2017: Now To U@NTU (March 17) to celebrate OIA's 10th anniversary. On Partner Day, more than 70 presidents, vice presidents, and directors of international affairs from 36 partner universities in 17 countries gathered and were introduced to NTU's current state of internationalization, strategic partnerships, study abroad programs, Plus Academy programs, and international student services. Visiting representatives were also invited to tour the Stanley Wang D-School@NTU, and took part in group discussions. By creating such innovative platforms for global exchange, we look forward to perennially extending NTU's international reach.





SoNTU GIFTS: PROMOTING A NEW IMAGE FOR NTU

Launched in September 2015, SoNTU is NTU's self-owned brand aimed at demonstrating the university's determination to pursue excellence. The brand is characterized by the color yellow, which symbolizes the proactivity, optimism, willingness to meet challenges, and intuition of all NTU members. One of the two collections, SoNTU Original, promotes NTU's image through iconographic representations of the university. The other collection, SoNTU Select, features products that the OIA designed jointly with local companies to advocate Taiwan's international visibility. Currently, SoNTU has made more than 40 products available online, and our gifts are appreciated across many countries worldwide.

2017 NTU DAY@PKU:

A NEW FLOURISHING OF ACADEMIC COLLABORATION

At the invitation of Peking University (PKU) President Jianhua Lin, former NTU President Pan-Chyr Yang led a 77-member delegation of faculty members and students to China's most prestigious university to participate in the NTU Day@PKU on April 25-26, 2017. While there, former President Yang delivered two speeches: "From Clinical to Translational Research and Higher Education" and "New Era of Lung Cancer Therapy: From Precision to Cure." This event was aimed at strengthening and deepening the two universities' strategic partnership, and at creating opportunities for a new flourishing of academic cooperation. The three main themes of this interdisciplinary academic meeting were environmental protection, long-term care for seniors, and innovation and entrepreneurship.

GLOBAL VISION AND LOCAL

The 2017 Welcome Mixer for (Inter)national Students on September 9 received around 1,500 guests, including over 1,000 international students from 26 countries and more than 400 volunteers, for an unforgettable cross-cultural experience.

The Mixer opened with some lively indigenous dance performances, which made the vigor and festivity of the Amis Harvest Festival come alive for everyone present. This event is named "Welcome Mixer" because we hope the "mixing" of local and international students will deepen mutual understanding and enable local students to broaden their global vistas and develop their pan-cultural awareness.





STUDY ABROAD PROGRAM: DEVELOPING GLOBAL TALENT POOLS

Currently, NTU has more than 500 exchange student programs at universities in 46 countries. The NTU Study Abroad Fair takes place annually, and allows international students to introduce their original schools, provide the latest information about exchange programs, and interact with local students. Meanwhile, exchange students who have completed their study at NTU are invited to share their experiences at the fair. NTU's summer programs attract more than 300 international students every year. In addition, annual workshops are organized wherein local students share their exchange or visiting studentship experiences abroad.





NTU PLUS ACADEMY: DIVERSE AND SPECIALIZED SHORT-TERM PROGRAMS

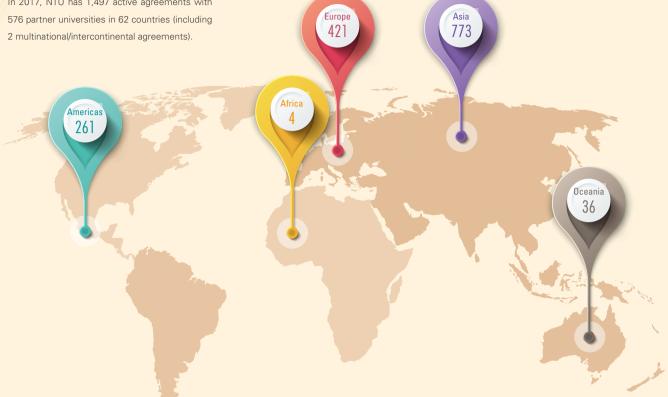
NTU Plus Academy offers more than 20 topic-based short-term courses, and organizes a wide array of exchange activities for teachers and students. These diverse courses and activities include tea tasting at Maokong, a scenic spot famous for tea plantations, where students learn how to brew tea; one-day trips to Yilan; culture nights where international students can showcase their native lands and societies; and Chinese culture events exploring the beauty of Chinese calligraphy.

In 2017, NTU welcomed over 700 students from the Chinese University of Hong Kong, the Education University of Hong Kong, Waseda University, the University of California, California State University, and many others.

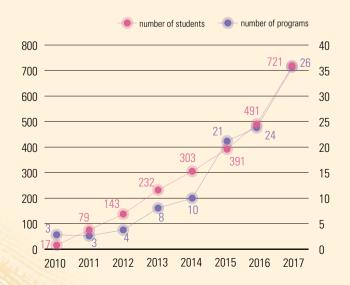


Academic Partnership Agreements

In 2017, NTU has 1,497 active agreements with



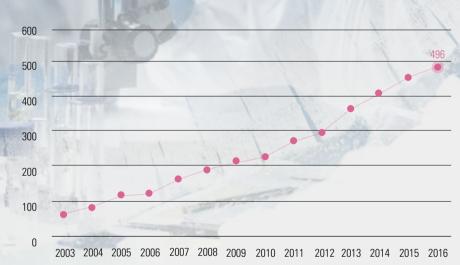
Plus Academy Growth



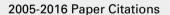
5,193 international students from 68 countries in academic year 2016/2017

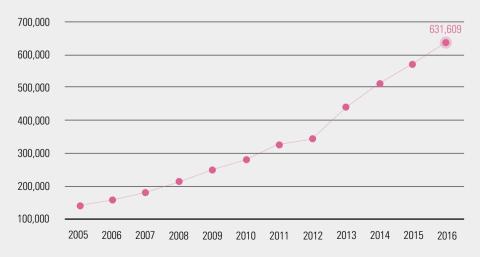
	Chinese Overseas Students	1,729
•	Exchange/Visiting Students	1,126
•	Chinese Language Program Students	1,041
•	International Degree Students	806
•	Plus Academy Short-Term Students	491

TOP RESEARCH



2003-2016 Highly Cited Papers*

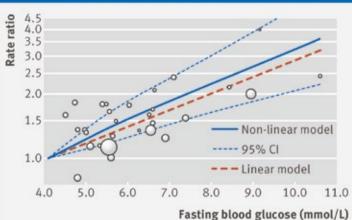






In 2016, the Office of Research and Development (ORD) launched the semiannual journal: *Landscape: NTU Research and Development* to highlight the influence of research done by NTU faculty and to promote the exchange of research and academic collaboration with institutes in Taiwan and abroad. Forwardlooking, innovative, and NTU-specific studies or monographs are featured in this journal. Moreover, the researchers will be invited to give TED talks as a means of giving back to the society, strengthening the influence of academia and research, and increasing the international visibility of NTU's research topics and domains. NTU's mission in the 21st century is to become a worldleading Asian university. To achieve this goal, we are actively integrating industry–academia collaborations on campus. Our resolute emphasis on the interdependency between research and practice will generate talented and pragmatic researchers, who will facilitate comprehensive growth and significant breakthroughs across all areas.

The inaugural issue of *Landscape* introduces readers to NTU's all-encompassing cancer research. For example, in the area of early prevention, a genetic mutation has been found to be highly correlated with incidence of lung adenocarcinoma (Gee-Chen Chang, Pan-Chyr Yang, & Ker-Chau Li). Moreover, it has been shown that early diagnosis of diabetes or prediabetes along with lifestyle adjustments are favorable to preventing pancreatic cancer (Yu-Kang Tu & Kuo-Liong Chien). In clinical treatment, the discovery of a mechanism that stops DNA replication sheds light on the use of small molecule drugs to inhibit cancer cell replication (Shu-Chun



Fasting blood glucose and risk of pancreatic cancer



Cancer Research: Prof. Fan-Jen Lee



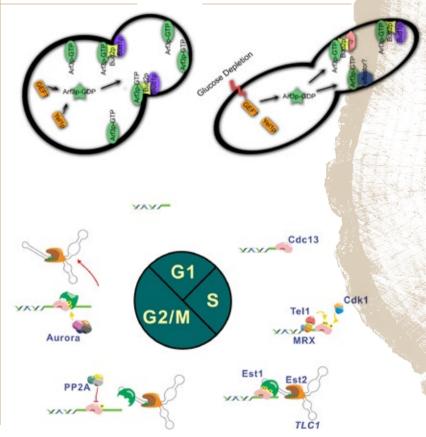
Typhoon Research: Prof. Hung-Chi Kuo

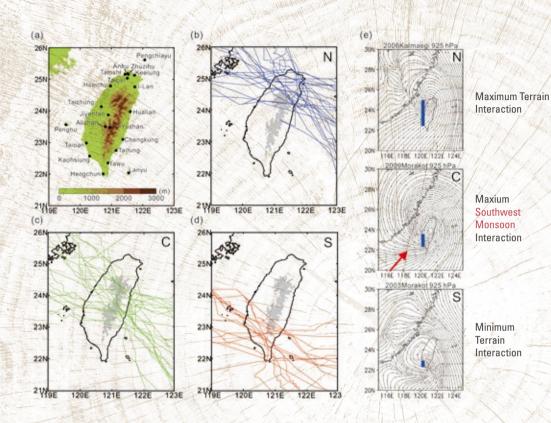
Teng). Also, small molecules, which disrupt the interaction between and activation of AMPK and Arf6, can be identified, thus creating a new means to fight cancer cells (Fang-Jen Lee & Jai-Wei Hsu). In cancer treatments and postoperative care, different treatments for liver cancer can affect a patient's postoperative quality of life (Wei-Chu Chie & Menggian Li). Finally, NTU scientists were the first to identify CXCL1's correlation with opioid painkillers and its potential application in developing an inhibitor for opioid tolerance (Wen-Mei Fu, Wei-Zen Sun, & Chih-Peng Lin). These innovations, presented in the first issue of Landscape, are expected to make concrete and invaluable contributions to cancer prevention and treatment.

The second issue of *Landscape* focuses on climate change. Taiwan is a contributor to climate change and probably one of the most vulnerable victims to extreme weather. One article discusses climate change governance, where scholars have been seeking solutions and breakthroughs by reexamining laws and policy frameworks (Jiunn-Rong Yeh & Tze-Luen Lin). In research on oceans, land, and sea level, a study of deep sea sediment shows that adding iron into ocean waters may not increase the growth of photosynthetic algae or reduce global warming as expected (Haojia Abby Ren). Another study measures the relationship between the hydrological cycle and sea level rise, and finds that the increase in land water storage over the past decade has decreased the rate of sea level rise by 20% (Min-Hui Lo). Moreover, while climate change seems to have caused

Yeast Form: Budding Polarity

Filamentous Form: Invasive Growth





the increase in rainfall in recent decades, a study argues that attributing the increasing trend of typhoon rainfall entirely to anthropogenic global warming could be erroneous (Hung-Chi Kuo). Also, a research team delves into the global cooling event, the Younger Dryas, that occurred 12 thousand years ago in North Atlantic regions, and predicts that if the northern hemisphere experiences abrupt cooling, most areas in Taiwan would remain dry and cold while the northeastern areas would face increased rainfall (Chuan-Chou Shen). Lastly, a study has developed a statistics-based flood forecasting model, which shows considerable potential for improving emergency responses and reducing the loss of lives and property caused by floods (Gwo-Fong Lin). These studies call on humanity to confront the crisis of climate change head-on, as only when we truly respect nature will we truly earn and appreciate its bounty and generosity.

INFINITE CREATION



D-SCHOOL@NTU

With the growing importance of innovation and entrepreneurship, Stanley Wang D-School@NTU was founded in 2014 and began offering credit courses in Fall 2015 in order to develop innovative educational practices.

D-SCHOOL STRUCTURE

MAKERSPACE

D-COURSE

D-SCHOOL STRUCTURE: A SCHOOL SHARED BY ALL NTU MEMBERS

D-School is a functioning division of NTU as well as the first virtual school to occupy physical space in Taiwan. NTU's executive vice president for academics and research is appointed by the university president to be the CEO of D-School. The CEO is responsible for coordinating various institutes at NTU into a cohesive environment for interdisciplinary teaching and research. The CEO and the 11 NTU deans form the advisory committee on the management and planning of D-School. In addition to the committee, D-School also features an administrative office, a faculty office, and a humanities and social sciences office.

D-COURSE: BUILDING A COLLABORATIVE INTERDISCIPLINARY TEACHING ENVIRONMENT TO ADDRESS SOCIAL ISSUES

D-School aims to create interdisciplinary collaboration by inviting faculty and students from different departments and fields to take part in courses. In addition, D-School cooperates with external organizations and industry experts, and applies this to the coursework. Our curriculum facilitates student exposure to a wide array of topics, engages them in in-depth discussion on working sites, and encourages them to address important social problems innovatively. To fulfil these goals, D-School has four categories of classes planned, namely Core Classes (DS5100 series), Workshops (DS5200 series), Projects (DS5300 series), and International and Corporate Projects (DS5400 series). Through this course design, we intend to develop students' core abilities to observe and solve problems, while equipping them with the ability to collaboratively brainstorm, innovate, and reinvent!

MAKERSPACE: CREATING A TEACHING SPACE FOR INNOVATORS

A makerspace has been established to provide students with the resources and equipment necessary for implementing creative ideas in the real world. D-School also supports students by offering workshops on techniques and skills required to actualize innovative ideas. D-School's diverse manufacturing infrastructure enables students to build design prototypes, conduct repeated tests, modify designs, and turn innovative ideas into reality.



CREATIVITY AND ENTREPRENEURSHIP PROGRAM

The program is dedicated to knowledge-based courses that integrate innovation and entrepreneurship. By combining "Knowledge Acquisition" with "Practicum," this program will develop a platform to gather entrepreneurial ideas and talent, as well as unite students of different backgrounds who want to start new businesses founded upon innovation and persevering entrepreneurship.

TAIWAN'S FIRST ENTREPRENEURSHIP EDUCATION CURRICULUM

The curriculum of this program has evolved over the years from being creativity-centered to one based on entrepreneurship. The work focuses on designing user experience, innovating services, and creating business models. The core curriculum includes entrepreneurial strategies, leadership, strategic analysis of business trends and opportunities, and entrepreneurial finance. This program also offers: "Seminar and Action on Creativity and Entrepreneurship," in which 14 business leaders are invited to share their startup experiences and provide validation funds to students for their prospective enterprises.



BECOMING AN ENTREPRENEUR Boot Camp for Students

In the Boot Camp this year, we collaborated with the Center of Innovation and Synergy for Intelligent Home and Living Technology to train students in the arts of observation, problem solving, and execution. This enabled them to think "out of the box" and put what they had learned into practice. The program has accepted applicants from the two other universities in the NTU System, thus encouraging cross-campus learning and fostering entrepreneurship in every student.

Opening an Entrepreneurial Vision

At the end of each semester, a public exhibition of student achievements is organized. In 2017, we also collaborated with the Chinese University of Hong Kong, Hong Kong & Guang Zhou Innovation and Technology Association, and Guangzhou University to arrange exchange activities whereby students could become even more inspired towards innovation and entrepreneurship. In addition, at the closing of 2017, the program will host a large dinner party for students and faculty, past and present, to celebrate the program's 10th anniversary.

Interconnecting Students in the Creativity and Entrepreneurship Community

This program has assisted in establishing a student

association, which continues to boost each startup team's enthusiasm and encourages growth in both senior and junior students. This year, along with similar associations from National Chengchi University and Soochow University, the association established the Northern Entrepreneur Federation, bringing together those in Northern Taiwan interested in entrepreneurship. In addition, the program manages a large social innovation project annually, introducing various social enterprises to creative and entrepreneural ideas from the younger generation.

Promoting the Education and Practice of Entrepreneurship

The program organizes a campus-wide forum every semester, where experts and scholars are invited to talk about the most relevant trends in entrepreneurship, foster new ideas among students, and create new opportunities for learning. By establishing entrepreneurship information platforms and organizing workshops and panels, we hope to attract students interested in innovation and entrepreneurship to join us. Furthermore, we want to help startup teams with potential to accelerate their application processes and their assimilations into NTU Garage in order to further cement the NTU Creativity and Entrepreneurship Program brand.

DECIPHERING NTU ARCHITECTURE





Administration Building

College of Liberal Arts



ADMINISTRATION BUILDING VS. COLLEGE OF LIBERAL ARTS

Opposite across Palm Boulevard, the Administration Building and the College of Liberal Arts were built in their distinctive styles during the Taihoku High School of Agriculture and Forestry (THSAF) period and the Taihoku Imperial University (TIU) period, respectively. Both predate the establishment of NTU.

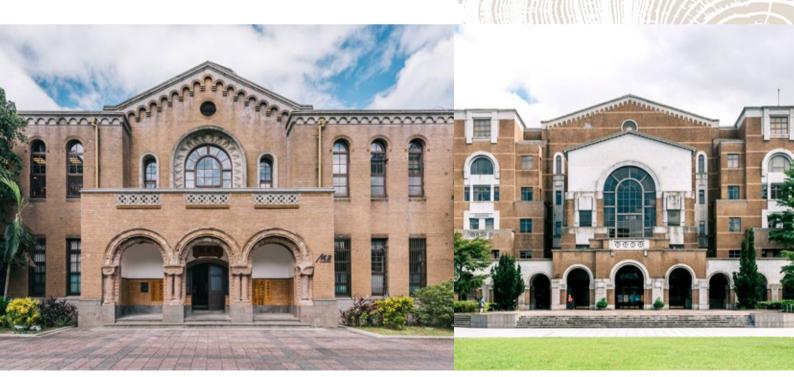
The Administration Building, originally THSAF's main building, became the central edifice of TIU Faculty of Agriculture and Forestry after THSAF was merged into TIU. The Administration Building is a two-story structure with red bricks and black roof tiles. The four majestic Corinthian columns guarding its main entrance are decorated with refined stucco inspiring an air of elegance and dignity.

Built in 1929, the year following the establishment of TIU, the College of Liberal Arts is typical of the TIU architectural complex. Standing in front of the structure, visitors are able to perceive such distinctive elements as the gable, arched windows, pitched roof, and ribbed tiles; all of which reflect the architectural eclecticism of the period.

MAIN LIBRARY VS. OLD MAIN LIBRARY

Completed in 1997, the Main Library is adorned with a large gable, a typical TIU architectural element that echoes the façade of the old library. To blend in with the modernist buildings on campus (e.g., Department of Civil Engineering, and the School of Forestry and Resource Conservation), flat rather than pitched roofs were used on either side of the its gable. The overall structure of the Main Library incorporates both major architectural schemes along Palm Boulevard, while augmenting the overall effect of symmetry and stateliness. As the prime vista of Palm Boulevard, the Main Library, is indubitably iconic.

The Main and Old Main Library façades are also similar in their use of arched windows, gables, porticos, and cloisters. These similarities not only create a harmonious campus landscape, but also convey the idea that the current Main Library is a historic continuation of the Old Main Library. Currently, the second floor of the Old Library serves as the Gallery of NTU History.



Old Main Library (now Gallery of NTU History)

Main Library



Main Entrance of TIU during Japanese colonization

MAIN ENTRANCE VS. SIDE ENTRANCE ON XINHAI ROAD

Built in 1931, the Main Entrance originally served as both TIU's main entrance and its guardroom. The symmetrical and sturdy look of the pillbox-like building gives dimension and depth to the structure. The gate pillars, built using local Qilian stones, adorned with the ribbed tiles produced by kilns in Beitou, and crowned with the elegant lamps, convey an air of restraint and solemnity. The pillars and lamps of several of NTU's side entrances have been designed to imitate those of the TIU period. However, the Main Entrance now features modern iron-spiked gates.

In 2014, the Side Entrance on Xinhai Road was redesigned during a renovation of public facilities on Mahogany Avenue. To recreate the TIU period-styled wrought iron gates, the Campus Planning Office scrutinized old photos, traced the pattern and design of the original fixtures, collaborated with contractors, and finally brought the old gates back to life at the side entrance.







Side Entrance on Xinhai Road



Imitation of TIU's wrought iron gate entrance





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