# National Taiwan Normal University Strategic Development Plan 2020-2025

### **Table of Content**

I.	Introduction	1
II.	The Challenges and Opportunities Facing Universities	2
III.	The Strengths of NTNU Today	
IV.	Mission	
V.	Vision	
VI.	University Development Goals and Strategies.	
VII.	Key Performance Indicators (KPI) and Supporting Resources	

### I. Introduction

One of the oldest institutions of higher education in Taiwan, National Taiwan Normal University (NTNU), founded in 1922 as Taihoku High School under Japanese rule, is fast approaching its centennial. The school was reorganized into Taiwan Provincial Normal College in 1946, making it one of the four institutions that offered higher education in Taiwan at the time. Following a status change in 1955, it was renamed Taiwan Provincial Normal University, and would go on to become National Taiwan Normal University, a full-fledged national institution, in 1967. Since its founding, NTNU has made teacher training its core mission, cultivating generations of global and domestic leaders and educators. With the passage of the Teacher Education Act in 1994, however, all colleges and universities in Taiwan were given the right to train teachers, meaning that NTNU had to change and reform itself. As a result, the university begin its transformation into a comprehensive university. Currently, NTNU is comprised of nine colleges (i.e., colleges of Education, Liberal Arts, Sciences, Arts, Technology & Engineering, Sports & Recreation, International Studies & Social Sciences, Music, and Management), with a student body of about 15,000, and offers degrees from bachelors to doctorates. Over the years, NTNU has excelled in all academic fronts. Besides holding a globally leading position in education, the university is also outstanding in liberal arts, arts, music, and sports. NTNU's academic performance in science, engineering, and technology is internationally renowned; the university's management and social sciences programs are also the best in Taiwan. Despite the many challenges NTNU has had to face, the university persisted and has earned wide recognition for its contribution to the cultivation of talents for the country and humanity at large.

In the 2015-2019 University Strategic Development Plan, NTNU positioned itself as a globally recognized comprehensive university. The university's objectives included nurturing future leaders well-versed in both humanities and sciences, conducting cutting-edge research for the benefit of society, positioning the university as a world-class educational research hub, establishing unique overseas Chinese education programs, and constructing an innovative base for arts and sports. NTNU was the recipient of the Ministry of Education's Aim for the Top University Project in 2011, and went on to receive funding from the Higher Education Sprout Project in 2018. NTNU was ranked 93 among Asian universities in 2019 by Times Higher Education (THE) World University Rankings; it was ranked 15 globally in the field of education. In addition, NTNU was placed 331 in the 2020 QS World University Rankings. In terms of individual subjects, a total of 11 fields of study made the ranking, with Education coming in at 31, and Library & Information Studies at 50 globally. In terms of national standing, *Global Views Monthly* ranked NTNU as Taiwan's top university in the "Arts, law, and business" category. In the 2020 *CommonWealth Magazine* USR University Citizen Survey, NTNU was ranked 4th in the "Public University" category.

In the 2020-2025 University Strategic Development Plan, NTNU aims "To Lead in Asia, and Excel in the World". The strategic plan has three pillars: Internationalization, Social Impact, and Heritage & Innovation. NTNU aspires to speed up internationalization, foster ties with industries, work towards interdisciplinary integration, and promote digital transformation. With persistent efforts

from faculty and staff, and with its century-old heritage as its foundation, NTNU is ready to embark on its next journey for the next hundred years to come.

### II. The Challenges and Opportunities Facing Universities

#### A. Challenges in Higher Education

Higher education is the cradle of innovative talents. Social and economic growth have been proven to be closely linked with the development of the university. As such, it is important to be observant of social changes and examine future challenges facing universities as we draft our university's new strategic plan. The following describes the three major challenges facing universities in Taiwan and other advanced economies:

### 1. Social Changes due to Globalization

Since the start of the 20<sup>th</sup> century, the process of globalization has led to increased competition and to a freer exchange of goods, services, and human capital. The resulting social changes have also had a profound impact on higher education institutes, their curriculum structure, pedagogical strategies, and modes of learning. Finding ways to address these challenges is the top priority for the sustainable development of many universities around the world.

### 2. Changes in Job Market Demand

Digital technology advancement has had a tremendous impact on all industries. In the digital age, some professions could gradually lose their relevance, while others will emerge and prevail. How universities adapt their curriculum and pedagogy to equip students with the most in-demand skills is the second major challenge facing many universities.

### 3. Changes in Demographics

Declining birth rates in developed countries are causing a shortage of labor, creating problems for universities in their pursuit of excellence. Taiwan, for instance, has an aging population, which increases demand for biomedical technology research and long-term care for the elderly. This is why universities may need to reconstruct teaching, research, and budgeting accordingly. The changes in demographics is consequently the third major challenge facing universities.

### **B.** Shifting Trends That Shapes the Future of Higher Education

To address these issues, universities in Taiwan and other developed countries are actively tapping into their resources and potential to work towards the following goals:

## 1. Attract international talents and foster international partnerships for greater diversity

Globalization is reshaping the higher education landscape. Where universities used

to be confined by geographical, political, social and language barriers when trying to create an international learning environment, that confinement has now been shaken up by new technology. Today's telecommunication technology fosters collaboration between universities, facilitating the formation of cross-border, cross-domain higher education networks. Thinking globally, many universities are putting more and more emphasis on the importance of sustainable development in their strategic development, many of which are in line with United Nations' 2030 Sustainable Development Goals.

### 2. Promote digital transformation and build industry-academia collaborative links

To address the changing needs in the job market, universities are striving towards digital transformation through the development of mobile learning, analysis of learning statistics, and adoption of virtual and augmented realities. To improve students' digital literacy and bridge the gap between theory and practice, universities are also encouraging students to participate in domestic and international internships and industry-academia collaborative projects.

### 3. Adjust organization structure and develop innovative interdisciplinary education models

Low birth rates and aging populations are pushing many universities into structural transformations. These include making organizational adjustments and, alternatively, forming alliances with other universities for better sharing of resources. Universities are also becoming increasingly focused on the cultivation of interdisciplinary talents as opposed to single-discipline training. To facilitate openness and inclusiveness on campus, universities are making an effort to recruit underprivileged and minority students. They are incorporating diverse and innovative teaching and learning practices, such as digital learning, micro-programs, industry-academia collaborative programs, open loop universities, etc., to better address current social development needs, and fulfill their social responsibilities.

### III. The Strengths of NTNU Today

### 1. A Long and Rich History with Innumerable Talented Faculty, Students, and Renowned Alumni

Since the promulgation of the Teacher Education Act in 1994, teacher training has become more diversified, and NTNU has transformed itself into a comprehensive university. Although the word "Normal" in the university name has been retained, its interpretation has also been updated to mean "to be a master at work, and to be a model in life". The first half of the new interpretation conveys the university's expectation and hope that its students will

become masters and teachers, people that others would want to emulate in their respective fields. The second half asks students to be tolerant, well-learned, and well-mannered in life so as to become role models for others. NTNU graduates can be found in all areas and professions. In addition to filling the ranks of schools at all levels, NTNU has also nurtured experts and professionals in literature, education, arts, music, sciences, engineering, business, and so on. The university's 1-year post-graduation unemployment rate is only about 1.99%, far lower than the national average for the same age and education level (11.95% ~ 14.34%).

### 2. A Wide Coverage of Fields with a Strong Internationalized Learning Environment

NTNU currently has a total of 62 departments in nine colleges: College of Education, College of Liberal Arts, College of Science, College of Arts, College of Technology and Engineering, College of Sports and Recreation, College of Music, College of Management, and College of International Studies and Social Sciences. In the 2019 academic year, NTNU had a student body of 14,843 students, comprising 7,727 undergraduate, 5,796 master's level (including in-service professional programs), and 1,320 doctoral students. For international learning, the university had a total of 1,394 international degree program students (including bachelor, master, doctoral programs), 558 exchange and visiting students, and 401 students studying abroad through exchange and visitation programs. In addition, NTNU's Chinese learning program also on average attracts over 7,000 students from over 80 countries each year. All of these factors have contributed to making NTNU one of the most culturally diverse universities in Taiwan.

### 3. Consistent Global Ranking with High International Recognition

The quality of education at NTNU is evidenced by its academic reputation, research potential, and international impact. NTNU was ranked 93 among Asian universities in 2019 by the Times Higher Education (THE) World University Rankings. The same ranking placed NTNU 15 globally in the field of education. In addition, NTNU was placed 331 in the 2020 QS World University Rankings. Subject-wise, a total of 11 fields of study made the list, with Education ranked 31 globally, and Library & Information sciences coming in at 50. Domestically, NTNU was ranked by *Global Views Monthly* as Taiwan's top university in the "Arts, law, and business" category. In the 2020 *CommonWealth Magazine* University Citizen Survey, NTNU was ranked 4 in the "Public General University" category.

#### IV. Mission

The mission of National Taiwan Normal University is to cultivate talents through the pursuit of academic excellence, and to contribute to the welfare of humanity by sharing our expertise and knowledge.

### V. Vision

To inaugurate a new chapter in education, NTNU shall actively foster an internationalized environment, develop industry-academia collaborations, promote interdisciplinary integration, and accelerate digital transformation, so as to make NTNU a leading university in Asia and in the world.

### VI. University Development Goals and Strategies

### • Development Goals of the University, and Development Goals of Colleges and Administrative Units

The "2020-2025 University Strategic Development Plan" adopts both a top-down and bottom-up alignment approach. In addition to the "Development Goals of the University", each college and administrative unit should also develop its own targets, strategies, and action plans according to its purpose and mission. The plans of colleges and administrative units should still be aligned with the university's strategic vision and key development goals.

The below figure shows how the development targets, strategies, and action plans of colleges and administrative units should come under the umbrella of the university's strategic vision.

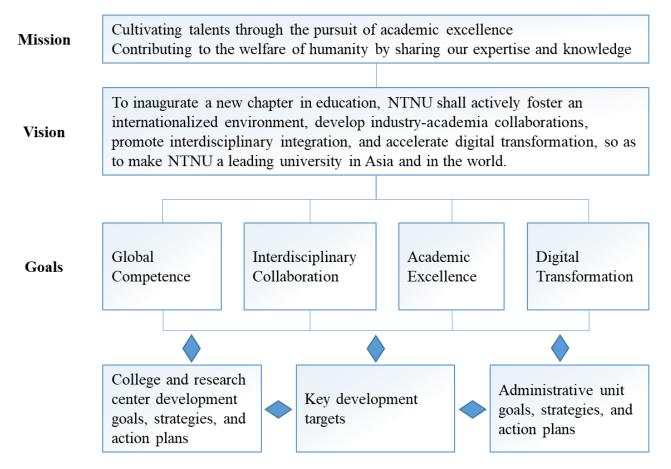


Figure. Development Goals of the University, and Development Goals of Colleges and Administrative Units

#### **University Goals and Strategies**

#### 1. Global Competence

To grow the university into a leading education provider in Asia and the world, NTNU has made it a key priority to build an international research and learning environment to develop global competence in students and faculty. We endeavor to cultivate and nurture individuals to become global citizens, deepen their mobility and international outlook, and build international partnership networks to maximize our impact. Working in tandem with the globalization efforts of our colleges, our targets for 2020 - 2025 include an outgoing student share of 25%, an international student share of 15%, over 1,500 incoming foreign students, and an international faculty share of 10%.

To meet these targets, we will:

- 1) build a learning environment that is culturally open and inclusive;
- 2) nurture young talents into future global leaders and educators;
- 3) foster international academic collaborations;
- 4) deliver globally impactful research;
- 5) encourage involvement in an international community; and
- 6) fulfill our responsibility to global sustainable development.

### 2. Interdisciplinary Collaboration

Industry-academia collaboration will not only help students in employment, its research findings can also promote industry upgrades and drive socioeconomic development. NTNU has long demonstrated excellence in fields such as education, humanities, social sciences, technology, arts, and sports, and will continue to be a force to be reckoned with for social development and economic growth. In a time where humanity is being challenged in areas such as climate change, disease, education equity, and poverty, NTNU will join forces with local communities, industries, governments, and the international community to contribute to local and global sustainable developments. In conjunction with our colleges' efforts in bridging the gap between industry and academia, our targets for 2020 - 2025 include at least 1,000 industry-academia collaborative projects, over 900 patents and technology transfer cases, and 30% of our students interning in industries.

To meet these targets, we will:

- 1) optimize our resources to create a diverse learning environment;
- 2) cultivate business-and-industry-ready talents;
- 3) promote industry-academia collaborative projects;
- 4) assist in industrial upgrade and economic development;
- 5) fulfill university social responsibilities; and
- 6) ensure sustainable community development and innovation.

### 3. Academic Excellence

Single-subject knowledge may fall short of solving of today's ever more complex problems. Rather, we aspire to step out of our comfort zone into interdisciplinary studies and innovate. In the future, NTNU will join forces with its colleges to promote interdisciplinary learning, cross-domain visionary research, and cross-boundary digital learning. By bonding with our alumni around the world, we can create an open learning environment for higher education. In terms of academic excellence, we have set out several targets in the next five years. By 2025, 50% of our student body are expected to have attempted, and 30% completed, double majors, minors, or credit programs. As teacher training has been NTNU's hallmark feature and strength, it is our aspiration to add teacher training as a primary practice in our existing programs of early childhood education, secondary education, special education, and international baccalaureate educator certification by 2025. As such, NTNU will be able to provide a complete teacher training system that covers all spectrums from kindergarten, high schools (K-12), special education, to international teacher training.

To meet these targets, we will:

- 1) harness the power of interdisciplinary studies to drive innovation and entrepreneurship;
- 2) strengthen teacher training at all levels to maintain our leadership in teacher education;
- 3) support cutting-edge research and take initiatives in research advancement;
- 4) invest in digital learning to facilitate more online learning opportunities; and
- 5) connect with our alumni from around the world to open up new possibilities.

### 4. Digital Transformation

The future is uncertain, yet full of opportunities. Universities will have to be flexible with their organization to be able to seize new opportunities and create new outlooks. NTNU will continue to optimize our administrative system, enhance administrative efficiency, streamline fiscal management, create a smart campus, and be our colleges' staunchest backing in their development. Our targets for 2020-2025 include upgrading existing classrooms to smarter and more interactive ones, which shall account for 60% of our total instructional spaces by 2025, and a satisfaction rate of 90% for students finding housing.

To meet these targets, we will:

- 1) adjust organizational structure to seize greater opportunities for development;
- 2) improve administrative efficiency to empower academic performance;
- 3) streamline university financial management to support and promote innovations; and
- 4) set up the infrastructure of smart classrooms that serves as a pathway to a smart campus.

### VII. Key Performance Indicators (KPI) and Supporting Resources

### 1. Key Performance Indicators (KPI)

All colleges and departments must perform as planned, with demonstrable contributions to realizing NTNU's objectives, including Internationalization, Corporate Engagement, Multidisciplinary Research Support, and On-Campus Information Technology Infrastructure. All administrative units must support these efforts through funding and resource allocation. To ensure delivery of these objectives, Key Performance Indicators (KPI) are used to assess the performance of each academic and administrative unit.

### 1) Internationalization

- i. The current percentage of our students participating in overseas programs is around 14%. The target is to have at least 25% of our 2025 graduating class graduate with overseas program experiences.
- ii. International students currently make up about 11% of our student body. The target is 15% by 2025.
- iii. Incoming international exchange students currently total 1,168. The target is 1,500 individuals by 2025.
- iv. The school currently employs 53 full-time foreign faculty members (including dual nationals). The target is to make foreign teachers account for 10% of the school's full-time faculty body by 2025.

### 2) Corporate Engagement

i. Industry-academia collaborative projects totaled 749 cases over the last six years. The target is 1,000 between 2020 and 2025.

- ii. Patent and technology transfer totaled 679 cases over the last six years. The target is 900 between 2020 and 2025.
- iii. Currently, a total of 319 NTNU students are interning in industries. The target for 2025 is a 30% internship completion rate for graduates.

### 3) Multidisciplinary Research Support

- i. Those pursuing a double major, double minor, or credit program currently make up 34.88% of the student body. The target is 50% by 2025.
- ii. Those who have completed a double major, double minor, or credit program currently make up 13.86% of our graduating class. The target is 30% by 2025.
- iii. NTNU currently offers teacher training programs in early childhood education, secondary school education, special education, and international education. The target is to establish an additional program in primary school education by 2025 for a holistic teacher training system.

### 4) On-Campus Information Technology Infrastructure

- i. By 2020, all classrooms on campus have been equipped with computers, projectors, and network connections. The target for 2025 is to upgrade 60% of these classrooms to smarter and more interactive ones.
- ii. Digital services are to be fully integrated into NTNU's existing information technology infrastructure. The target to make university services readily available with employee or student digital ID by 2025.
- iii. The school can currently satisfy the housing needs of 66% of students. The target is 90% by 2025.

### 2. Supporting Resources

NTNU will provide all units with suitable support, including funding, manpower, and space.

### 1) Funding Support

NTNU's final account for the 2019 fiscal year totaled NT\$6,127,305,216. In the upcoming years, in addition to current budgets, NTNU shall seek funding for industry-academia collaboration projects, solicit donations from businesses and alumni, and generate income through space rentals, etc., to support our colleges and administrative units.

### 1). Personnel Support

NTNU currently has 915 full-time, contracted, and project-based instructors, researchers, and teaching assistants. Supporting staff and contractors currently total 734. Within the confines of hiring and funding quota, NTNU will support our academic and administrative units in offering employment opportunities for both R.O.C. and non-R.O.C. citizens.

### 2). Provision of Space

NTNU's Heping and Gongguan campuses currently total 223,682 square meters, with a total

floor area of 341,841 square meters. Linkou campus totals of 320,011 square meters, with a total floor area of 91,567 square meters. NTNU will continue to evaluate current available spaces, expand instructional and research buildings, and enhance the efficient management of space and facility to support our instructional and research needs.