INNOVATION REDEFINES THE FUTURE

西北工业大学
NORTHWESTERN POLYTECHNICAL UNIVERSITY
建校80周年
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Northwestern Polytechnical University (NPU) is located in Xi'an, China's renowned ancient capital and the gateway to the historic Silk Road. Today, as the ancient city is reinventing itself through science and technology, the university is entering a new phase of growth by taking the opportunity to develop original and cutting-edge innovations.

As with the city, NPU boasts a rich heritage. It has its roots in the State Northwestern Institute of Engineering, which was established in 1938. Governed by China's Ministry of Industry and Information Technology, NPU has always been a national key university and was one of the first universities selected for the national Project 211 and the Project 985, both of which aimed to raise the research bar at high-level Chinese universities. And in 2017, NPU was selected into the national 'Double First Class' plan, beginning its march to world-class renown.

Today, NPU is a multidisciplinary, research-oriented, open university, with 17 academic schools, an international education college, an honours college, and a Joint Educational Institution (JEI). The university programmes cover everything from fundamental science and engineering, to the humanities, management and social sciences. Its unique value lies in its research and education programmes in aeronautics, astronautics, and marine technology engineering — it is the only Chinese university featuring programmes in all the three areas. Moreover, NPU has strong programmes in materials, mechanical engineering and mechanics, as well as computer science, communication and control sciences. Its material science, chemistry, engineering and computer science disciplines are ranked among the global top 1%, according to the latest Essential Science Indicators (ESI) subject area rankings. With these distinctive strengths, NPU has laid a good foundation for continuing to provide world-class education in all these disciplines.

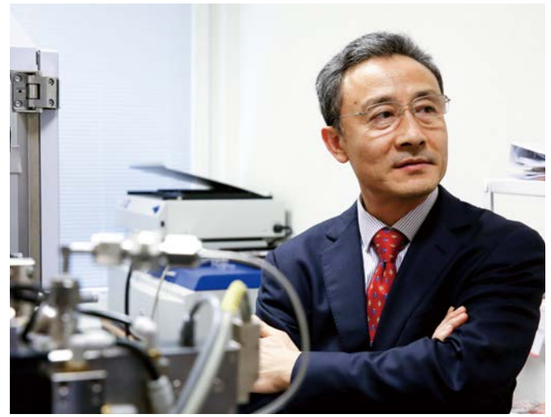
The research capacities of NPU are evident in its array of research facilities and programmes, including eight national-level key laboratories, two national engineering research centres, three high-level bases for international collaboration on science and technology, and four national-local joint innovation platforms. Annual research budgets amount to one million RMB per capita, ranking it in the top 10 among domestic universities.

In recent years, NPU has broadened the scope of emerging subject areas by developing a culture of cross-disciplinary research. This exploration has led to the establishment of several interdisciplinary research institutes, driving the development of disruptive technologies, ranging from unmanned systems technology and flexible electronics to space medicine.

NPU's commitment to innovation has brought promising prospects for its future development. It is on track to build a first-class university with first-class disciplines, expanding the horizon for life-changing new discoveries in science and technology for our rapidly changing and globalized world. ■

REACHING FURTHER FOR DEEPER DISCOVERY

An interview with Wang Jinsong, President, Northwestern Polytechnical University (NPU)



What are the objectives of NPU?

We are striving to be a world-class university with global influence in aeronautics, astronautics, marine technology and other fields. Seeing educating students as the core mission of a university, we take talent fostering as the essential task at NPU. We seek to train our students to be innovative, well-rounded and talented individuals with global perspectives, a strong sense of social responsibility, and deep expertise.

What has been the NPU development path?

NPU's history can be traced to the State Northwestern Institute of Engineering, which was founded in 1938. It was merged with the East China Institute of Aeronautics and later, the Department of Aeronautics of Harbin Institute of Engineering. Since the founding of the People's Republic of China, NPU has received strong support from the central government. It was designated as a key national university in 1960; among the first to be selected for the national 211 Project in 1995; and became part of the 985 Project in 2002. More recently, it was named as a class 'A' university in the national 'Double First Class' plan in 2017. Throughout the past 80 years, the university has set many records in China and produced leading figures in all walks of life, contributing to China's science, technology and socioeconomic progresses.

How does NPU support China's innovation endeavours with its research?

We have set up an academic system by disciplinary clusters. While reinforcing our leading positions in aeronautics, astronautics, and marine technology disciplinary clusters, we are also promoting development in materials, mechanical engineering, mechanics, computer science, communications, control sciences, as well as natural science, humanities and social sciences disciplinary clusters to form a comprehensive system.

Next, focusing on cutting-edge technologies and national strategic needs, we are developing emerging interdisciplinary areas, having launched programmes in unmanned systems, medical aspects of specific environment, flexible electronics, ecology, and protection of cultural relics. Faculty members are encouraged to focus more on basic research, and to build cross-disciplinary teams for large-scale projects, so as to drive more original discoveries and enhance academic influences.

What philosophy underpins NPU's success?

The philosophy we have been following for years is to see students as the basis and take education as the essential task, to put scholars at the centre and promote academic spirit, and to emphasize the sense of responsibility. Ultimately, all our work is for students' interests and benefits, and is centred on education. Meanwhile, we also encourage respecting scholars and valuing academic research. We reinforce the value of taking responsibility. These are common values shared and followed by faculty and students, and will inspire future generations at NPU to strive for our goals.

How will you make NPU a global university?

To become a global university, we need to work on both international collaboration and domestic outreach. For the former, we are promoting internationalization of faculty members and students.

We have created platforms and facilities to attract graduates from world-renowned universities to join us and support overseas exchange and visits of our faculty members to broaden their visions. We also encourage our students to study overseas, and are active in recruiting outstanding international students to study at NPU.

NPU has built close ties with more than 250 universities overseas. Our collaboration network extends to Europe, North America, Africa and Asia. A cooperation with Queen Mary University of London has brought about the first school in Northwest China jointly run by Chinese and foreign universities.

On the domestic front, we have built the Research and Development Institute in Shenzhen, the Qingdao Research Institute, the Chongqing Scientific Innovation Center, the Yangtze River Delta Research Institute and a new campus in Taicang of Jiangsu province. A new research institute is under construction in Beijing. These centres outside Xi'an have reinforced our capacity to attract talent, train students, and transform research results. Positive effects are starting to show. ■