

2023



TSINGHUA  
UNIVERSITY

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# Anniversary Message

## We Advance in Unity in A New Era of Diligent Self-Improvement

### Message for the 112th Anniversary of Tsinghua University

By Qiu Yong, Secretary of the CPC Tsinghua University Committee and Wang Xiqin, President of Tsinghua University



“Among emerald trees, the pavilion takes flight; Hues of rainbow clouds, adorn the pool so bright.” In such a delightful spring, Tsinghua University will celebrate its 112th anniversary, as many alumni and friends gather together once again with great joy. On behalf of the University, we are immensely pleased to extend our warmest regards and best wishes to all our alumni at home and abroad, as well as our faculty, staff and students. We would also like to express our heartfelt gratitude to friends from all sectors of society who have shown their interest in and support for Tsinghua’s development over the years.

The grand blueprints inspire the people and the clarion call of the times urges us forward. 2022 had been an extremely important and critical year in the history of both the Communist Party of China (CPC) and the country. With the success of the 20th CPC National Congress, the people have been fully mobilized to build China into a modern socialist country in all respects and to advance the great rejuvenation of the Chinese nation. It has also pointed out the direction for Tsinghua University to pursue a new path and established guidelines for action to build a world-class university with Chinese characteristics.

An enthusiasm to study and implement the guiding principles of the 20th CPC

National Congress has surged up in Tsinghua. Our faculty, staff, and students have been diligently cultivating their minds and spirit with Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. We resolutely uphold the establishment of both Comrade Xi Jinping’s core position on the Party Central Committee and in the Party as a whole and the guiding role of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. We boost our consciousness of the need to maintain political integrity, think in big-picture terms, follow the leadership core, and keep in alignment with the central Party leadership. We stay confident in the path, the theory, the system, and the culture of socialism with Chinese characteristics. We firmly uphold Comrade Xi Jinping’s core position on the Party Central Committee and in the Party as a whole and uphold the Central Committee’s authority and its centralized, unified leadership. Furthermore, we regard science and technology as the primary productive force, talent as the primary resource, and innovation as the primary driver of growth, in order to gather and inspire great confidence and power as we embark on new quests and contribute to the new era.

Planning ahead and advancing with great enthusiasm, the University has convened its 15th CPC Congress, where development

and achievements over the past five years were systematically reviewed, the invaluable experience of running and governing the University in the new era comprehensively summarized, and future tasks laid out. At this new historic moment, the University shoulders paramount tasks on a challenging quest. We shall firmly remember our missions as we go ahead, reinforce the all-round leadership of the Party and promote high-quality development. Driven by innovation and inspired by reforms, we will focus on our responsibility to foster integrity and promote our students’ rounded development. Moreover, we will actively support major national strategies while maintaining an open stance. Focusing on the people-centered philosophy of development, we will launch the University’s 14th Five-Year Plan (2021-25), Double First-Class University Initiative and 2030 Mid-and-Long Term Strategies. We will endeavour to achieve the University’s high-quality development as we advance towards joining the ranks of leading world-class universities.

Tsinghua has implemented the fundamental task of fostering virtue through education and fostered students who have all-round moral, intellectual, physical, and aesthetic grounding with a hard-working spirit. The University has been extensively promoting Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era through textbook preparation, classroom teaching, and ideological education, while formulating the comprehensive reform plan for ideological and political education so that the cornerstone of ideological and political education of the new era may be laid. The 26th Symposium on Education was held to further intensify educational reforms on the theme of “perfecting the educational-evaluation system, optimising development and

organizational models and enhancing the capabilities to cultivate high-end talent”. Meanwhile, we have established Weixian College and launched a Marxism program and the “Outstanding Physician-Scientist Class” for undergraduate admission. We have also established the National Graduate College for Engineers while enhancing the scale and quality of the recruitment of students for specialized postgraduate degrees. We have driven the reform of specialized postgraduate degrees and explored new talent-cultivation models with industry leaders. As we strive to train all-round talent as the builders and successors of socialism, we have formulated plans for the introduction of physical education, aesthetic education and labour education while vigorously promoting their importance in Tsinghua. Yang Qian, an Olympic gold medallist and an undergraduate student of Tsinghua, was honoured with a China Youth May Fourth Medal last year, while Liu Dibo, a volunteer at the Beijing 2022 Winter Olympics and a PhD student at Tsinghua, was named the “Most Beautiful College Student” of 2022. Moreover, for the first time, Tsinghua Student Sports Teams were champions in both men’s and women’s basketball games in the Chinese University Basketball Association (CUBA) league. These young men and women are shining bright in the new era. On the eve of the 100th anniversary of the founding of the Communist Youth League of China, students from Tsinghua are calling for “everyone to contribute to national rejuvenation, starting from me, starting from now,” as they set their minds on serving the Party and the people.

Advancing resolutely with great confidence, we improve through reform and innovation. The University has been targeting global science frontiers, serving the main economic battlefield, striving to fulfil the significant needs of the country and benefiting people’s lives and health as we actively become part of the country’s new system for mobilizing the resources nationwide and continue to improve the University’s innovation system. Focusing on interdisciplinarity, we have established programs in key fields such as integrated circuits, advanced materials, carbon peaking and carbon neutrality. With the objective of training compassionate, top-notch physician-scientists and academic doctors, we have re-established the frameworks and functions of our medical programs to develop a new system for medical education at Tsinghua. Meanwhile, we are advancing the construction of disciplines such as Chinese Paleography, History and Party Building of the Communist

Party of China, and Discipline Inspection and Supervision. The Institute for Discipline Inspection and Supervision, Tsinghua University (THUDIS) has been established to accomplish the academic mission of building China’s independent knowledge system. Furthermore, we have implemented a comprehensive reform of our State Key Laboratories. Our State Key Laboratory of Tribology in Advanced Equipment, and State Key Laboratory of Power System Operation and Control have been selected as the first batch of State Key Laboratories. Three of our laboratories have undergone restructuring, including the State Key Laboratory of Intelligent Green Vehicle and Mobility, while the building of the State Key Laboratory of Internet Architecture has been newly approved. The University boasts numerous significant achievements in academic research, and the number of its projects supported by both the National Key R&D Program of China and the National Natural Science Foundation of China has reached a record high. The Tsinghua team has made the transistor with the smallest gate length for the first time and was selected as one of the top ten domestic science and technology news stories in 2022, and Volume 12 of the Warring States Bamboo Strips Collected by Tsinghua University was published. Following the formulation and implementation of the “Opinions on Furthering the Core Strategy of Building an Influential University Based on Talent in the New Era”, we will step up our training and recruitment of talents with a strategic mindset. We will also promote the reform of the personnel systems for our research series and professional researchers and encourage our faculty to engage in organised scientific research. We are intensifying the reform of our pilot teaching and research institutes and have formulated detailed plans for the creation of a digital campus. Seizing the opportunities of launching special investment projects, the New Civil Engineering Building, General Experiment Building and North Gymnasium have been constructed. We are also improving our resource allocation and service standards to build Tsinghua into a place where global talents have a greater sense of belonging.

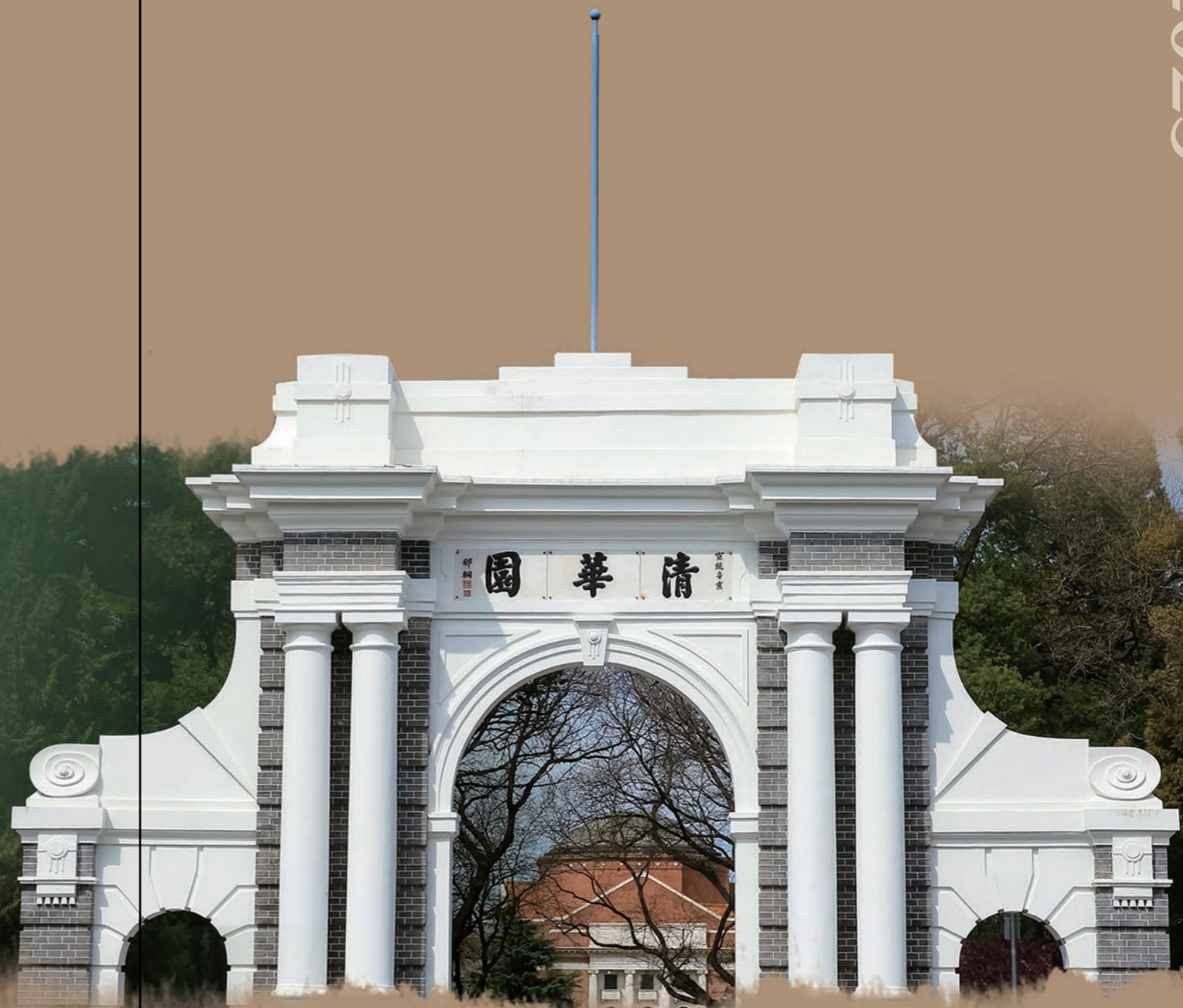
Unity is strength as we fight the pandemic as one and collaborate to advance forward with great courage. The pandemic control and prevention over the past three years have been anything but ordinary, and the University has always put the health and safety of our faculty, staff and students above everything else. We remain vigilant in pandemic control and prevention, diligent in teaching and scientific research

and relentless in reform and development. We regard teaching and talent cultivation as our sacred duty, learning and development as the necessary responsibility of students and the health and safety of elderly comrades as the most important task of pandemic control and prevention. During the pandemic, particularly in 2022, our faculty, staff and students formed a succession of pandemic-fighting teams, which overcame challenges together with all Chinese people, and clinched decisive victory in pandemic control and prevention. The COVID-19 pandemic has profoundly changed the world and shown that we are a human community with a shared future. Tsinghua has always focused on major issues and joint challenges facing human beings. We have launched the Climate x Campaign, organized by the Global Alliance of Universities on Climate. We have also successfully staged the 10th World Peace Forum, the 2nd World Health Forum, the Global MOOC and Online Education Conference 2022 and the plenary sessions of the World Digital Education Conference, and co-organized the “2022 Harmony and Cooperation Civilization Forum” with the International Confucian Association. We continue to implement the 2030 Global Strategy, which has seen the opening of the Tsinghua Southeast Asia Center in Bali, Indonesia, and the University’s first overseas social-practice base for students in Milan, Italy. We have proactively assumed the paramount responsibility of introducing and representing China globally. We promote academic exchanges, ideological interactions and cultural communication as we contribute our wisdom and strength to the building of a future world that is more peaceful, prosperous and tolerant.

The enormity of a task lends it greatness and glory. It is a shared dream of generations of our faculty, staff and students at Tsinghua to build a world-class university rooted in China. This historic moment is the most ideal time for Tsinghua to rapidly develop and achieve greatness. Let us rally more closely around the CPC Central Committee with Comrade Xi Jinping at its core and usher in a new era of diligent self-improvement as we advance in unity. We shall create the high-quality development of Tsinghua as a world-class university with Chinese characteristics as we advance the rejuvenation of the Chinese nation on all fronts through a Chinese path to modernization.

In this beautiful season of vibrant scenery and fine weather, we once again warmly invite our alumni to come back home and celebrate our shared festival!





# Why Tsinghua

The campus of Tsinghua University is situated in northwest Beijing on the site of the former imperial gardens of the Qing Dynasty, and is surrounded by a number of historical sites.





清華園

# History

Tsinghua University was established in 1911 under the name “Tsing Hua Imperial College,” initially as a preparatory school for students who would be sent by the Chinese government to study in the United States. The university section was founded in 1925 and undergraduates were then enrolled. The Academy of Chinese Learning was set up in the same year. The name “National Tsing Hua University” was adopted in 1928. The Graduate School was set up in the autumn of 1929 and several research institutes were formed in various departments.

During the War of Resistance against Japanese Aggression, National Tsing Hua University moved to Changsha in 1937 and merged with National Peking University and Nankai University to form Lin-shih-tahsueh or the National Changsha Temporary University. It moved to Kunming in 1938, and was renamed the National South-West Associated University. When the war ended, Tsinghua returned to its original location at Tsinghua Garden in Beijing in 1946. By then, the university had five faculties – humanities, law, science, engineering, and agriculture – and a total

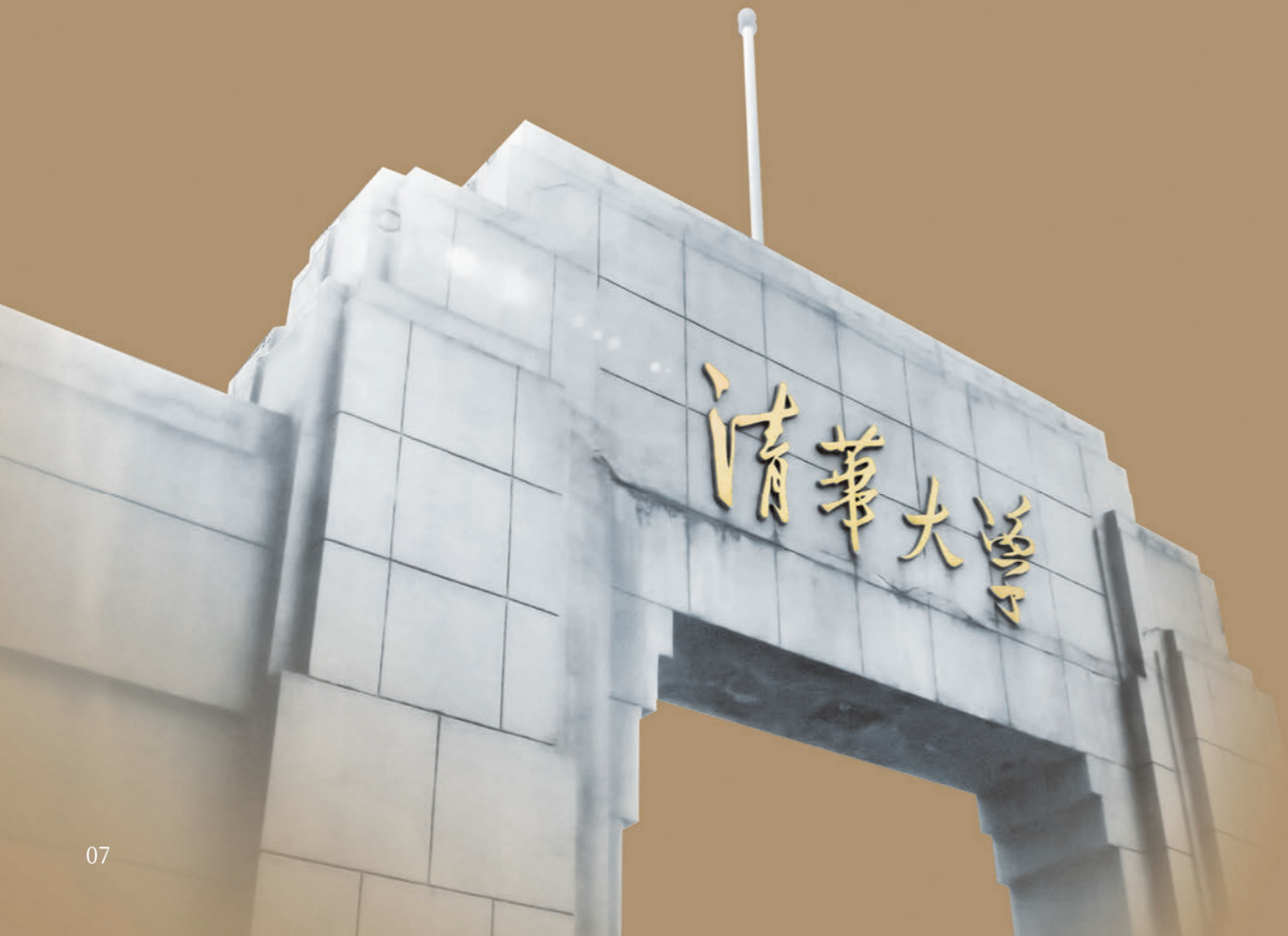
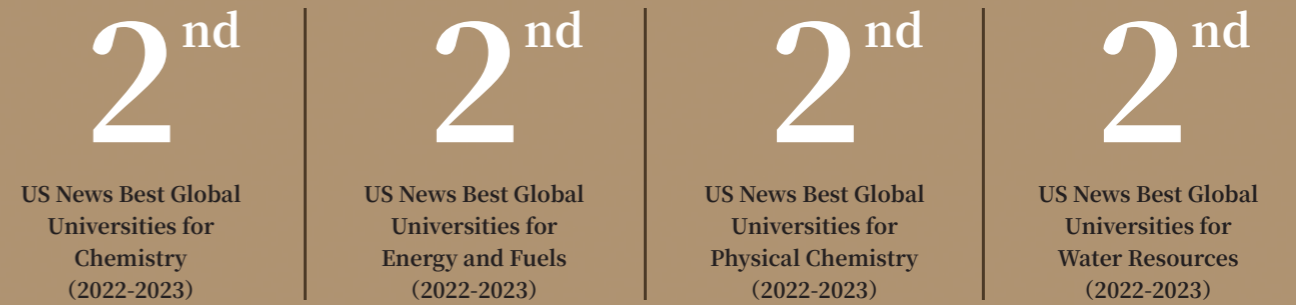


of 26 departments. In 1952, Tsinghua became a polytechnic university after the nationwide institute reorganization policy in higher education was implemented.

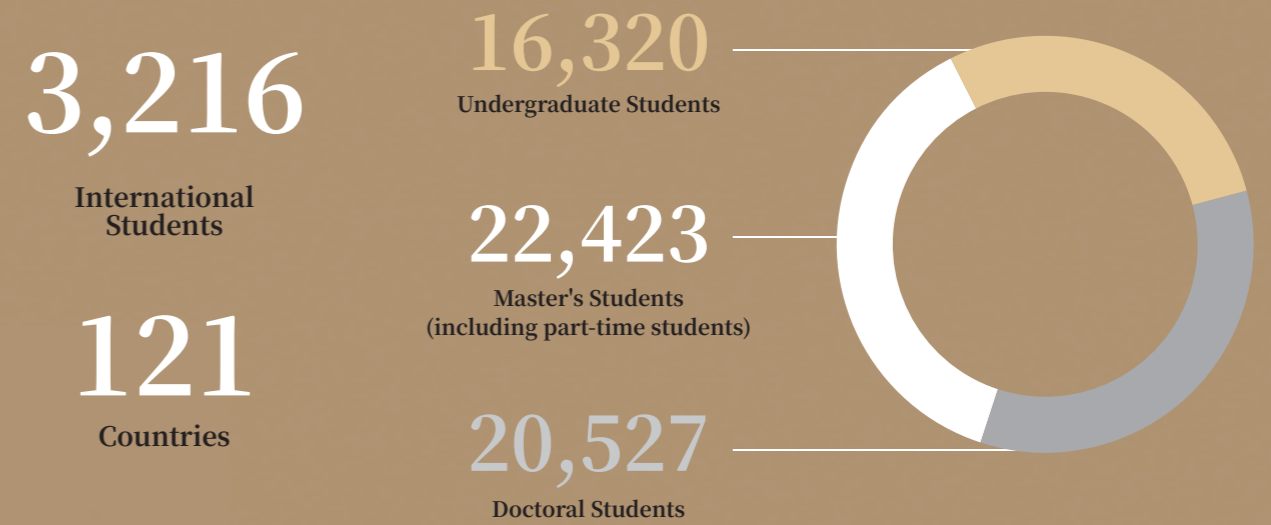
Since 1978, Tsinghua has gradually expanded and established more departments in the sciences, economics, management, humanities and law. In 1985, the School of Continuing Education was established. The Central Academy of Arts and Design of China merged with Tsinghua in 1999. In the last decade, the university has made advances in the refinement of academic disciplines, faculty development and research. Tsinghua is now a comprehensive research university, with 21 schools and 59 departments covering disciplines in science, engineering, literature, arts, history, medicine, and other interdisciplinary studies.



# Among the top research universities in the world



## A Diverse Student Body





# A Global University

Tsinghua University has signed cooperation agreements with 293 universities, research institutes, and international organizations from 53 countries at University level.







Global Innovation Exchange Institute



China-Italy Design Innovation Hub



China-Africa Leadership Development Institute



Tsinghua Shenzhen International Graduate School



Schwarzman College



Tsinghua Southeast Asia Center



Tsinghua University Latin America Center

# Global Strategy

Tsinghua University launched its global strategy in 2016. This comprehensive strategy reflects Tsinghua's vision to become a leading global university. Guided by this strategy, Tsinghua aims to foster innovative talents with global competence, serve China and the world through research, and strengthen its institutional competitiveness and global impact.

Since the formation of the global strategy, Tsinghua has established new global institutions dedicated to promoting international collaboration and providing students, faculty and staff with overseas opportunities to study, research and undertake internships. 2018 saw the opening of the Tsinghua University Latin America Center in Chile, the Tsinghua University Southeast Asia Center in

Indonesia, the China-Italy Design Innovation Hub in Italy, and the establishment of the China-Africa Leadership Development Institute.

Tsinghua University also initiated four University alliances, including the China-UK Humanities Alliance for Higher Education, Asian Universities Alliance (AUA), Global Alliance of Universities on Climate (GAUC), and Global MOOC and Online Education Alliance. In 2018, Tsinghua founded the Center for Global Competence Development (CGCD), which aims to provide guidance, support and resources for all Tsinghua students on global competence, while fostering a more international campus. Through exchange programs, field trips, summer projects and conferences, Tsinghua students continue to gain overseas experience.



## Tsinghua Shenzhen International Graduate School

Tsinghua Shenzhen International Graduate School (Tsinghua SIGS) was launched in March 2019. Tsinghua SIGS—Tsinghua University's sole campus located outside of Beijing—is a further expansion and integration of the Tsinghua Graduate School at Shenzhen (GSST) and the Tsinghua-Berkeley Shenzhen Institute (TBSI).

Tsinghua SIGS offers “6+1” theme areas to promote interdisciplinary research and learning: Materials Science, Data Science and Information Technology, Biopharmaceutical and Health Engineering, Ocean Engineering, Future Human Habitats, Environment and Ecology, and Innovation Management.

With Tsinghua University's advanced resources and Shenzhen's vibrant entrepreneurship environment, Tsinghua SIGS provides world-class graduate programs while supporting pioneering scientific research and close collaboration with industry in Shenzhen and the Greater Bay Area.

## Schwarzman College

Designed to inspire the next generation of global leaders, Schwarzman College was officially launched in April 2013, formally established in October 2015, and enrolled its inaugural class in 2016.

Schwarzman College integrates top educational resources from around the world and actively explores new ways to foster talents and enhance dialogue towards mutual understanding. The program aims to build a global network of dynamic leaders who will establish stronger relationships between China and a rapidly changing world and address the most pressing challenges of the 21st century, and to be a pioneer for Chinese and global higher education innovation.

Scholars chosen annually for this highly selective program will earn a master's degree at Tsinghua University. Scholars are selected from all over the world on the basis of their demonstrated leadership and leadership potential, as well as their academic aptitude and intellectual ability. Each year, the program admits up to 200 scholars from around the world. Each scholar will receive a comprehensive scholarship.

Leadership development is woven throughout the Schwarzman Scholars program, in both its academic and co-curricular programs. The academic program is rigorous and involves several required large lecture courses on leadership, global affairs, and China (the core), along with smaller elective courses that provide an opportunity for further in-depth learning on core themes.

## Global Innovation Exchange Institute (GIX)

In 2015, Tsinghua University collaborated with the University of Washington to establish its first physical presence overseas: the Global Innovation Exchange Institute (GIX), with initial foundational support from Microsoft, in Seattle, U.S.A.

To deepen students' knowledge of the development of technology solutions, the GIX Dual Degree Program integrates the Master of Science in Technology Innovation (MSTI) which includes courses in Connected Devices and Robotics from the University of Washington with the Master of Science in Engineering (Data Science and Information Technology) (MSE(DSIT)) from Tsinghua University. In 2020, a new track in Design, and a third track in Architecture in 2022, were added to the program with collaboration from the Academy of Arts and Design and School of Architecture in Tsinghua University.

With a dual-campus curriculum, students spend the first year in Beijing, where they get connected with a thesis advisor and take courses on the Tsinghua campus, and then leave for Seattle to complete their 18-month MSTI program.

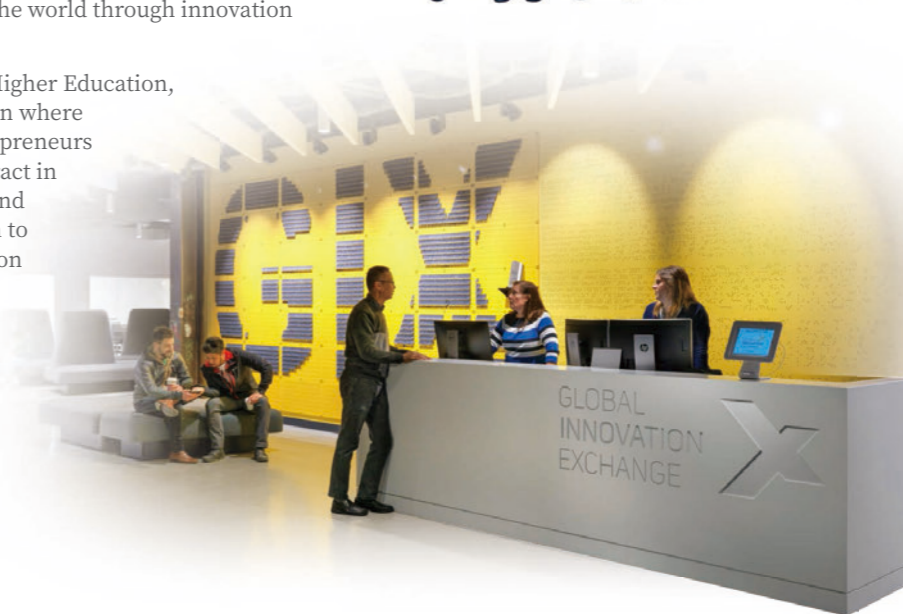
After meeting the degree requirements of both universities, students will be awarded a Master of Science in Engineering (Data Science and Information Technology) (MSE(DSIT)) or a Master of Fine Arts (Design) or Professional Master in Architecture from Tsinghua University, and a Master of Science in Technology Innovation (MSTI) from the University of Washington.

Since its establishment, GIX has welcomed six cohorts of students from more than 20 countries and regions. The graduates have become innovators, entrepreneurs, and thought leaders, contributing to the effort of meeting the toughest challenges facing the world through innovation and global collaboration.

Featuring Re-Definition of Higher Education, GIX is a center for innovation where students, scholars and entrepreneurs from around the world interact in the project-based learning and interdisciplinary integration to cultivate leaders in innovation who work collaboratively to solve real-life challenges.

## China-Africa Leadership Development Institute

Supported by UNESCO, the China-Africa Leadership Development Institute (CALDI) was jointly established by the Institute of Education and the Office of International Affairs, Tsinghua University. CALDI is committed to training African officials, educating young Africans, developing the human resource of Chinese companies in Africa, and supporting Chinese students' internships in Africa. CALDI promotes the implementation of the Belt and Road Initiative and provides strong support for the China-Africa comprehensive strategic and cooperative partnership, fulfilling the UN 2030 Agenda for Sustainable Development.





## China-Italy Design Innovation Hub

Founded in 2017, the China-Italy Design Innovation Hub (CIDIH) is a design and innovation platform co-established by Tsinghua University and Politecnico di Milano. The Hub and the Tsinghua Arts and Design Institute in Milan (ADIM) were officially unveiled in Milan, Italy in 2018. As the first education and research base established by Tsinghua University in Europe, the China-Italy Design Innovation Hub includes education, design research, exhibition, and cultural exchange. Through innovative management and operation, the hub also cooperates with the industry, actively promoting technology transfer. It also contributes to educational, scientific, and cultural exchanges, and to the industrial development of China and Italy. In 2021, the China-Italy Youth Future Fashion Design Competition was launched as one of the major activities of the “China-Italy Year of Youth Innovation and Entrepreneurship.” The competition aims to enhance cultural exchange and cooperation in creativity, innovation, and entrepreneurship between China and Italy, and promote the integrated development of the arts, science, and technology.

Focusing on aesthetics, the competition has become an international platform for fashion innovation, injecting a new vitality into global sustainable development.



## Tsinghua University Latin America Center

Tsinghua University Latin American Center was established in Santiago, the capital of Chile, on December 6, 2018. The Center serves as the base of network and exchanges for the university in the Latin American region, advocating for Tsinghua’s core task of cultivating talent. It is committed to building an integrated communication platform among Chinese and Latin American government agencies, academic, think tanks and business communities, while endeavoring to expand cooperation in academic research, people-to-people exchanges, and scientific and technological innovation between Tsinghua University and Latin American countries.

During 2022, Tsinghua Latin American Center actively engaged with and supported several faculties of Tsinghua University, including the School of Economics and Management, the School of Architecture, the School of Medicine, the Office of Technology Transfer, the Global MOOC and Online Education Alliance, the Center for Global Competence Development, the Language Center, and the Institute for Public Safety Research, with the purpose of expanding towards Latin America.

In addition, it teamed up with various schools and departments of Tsinghua University, as well as local university partners in Latin American countries such as Chile, Peru, Mexico, Brazil, and Uruguay, to hold several international symposiums on key topics such as Digital China and online education cooperation between China and Latin America, Technology Transfer, China’s economic development prospects, and Global Competence Development for students and the innovative design of the “Exploring Latin America” and “Understanding China” online course design and multilateral cooperation.



## Tsinghua Southeast Asia Center

The ground-breaking ceremony for the Tsinghua Southeast Asia Center (Tsinghua SEA) was held at Kura Kura Island in Bali, Indonesia in October 2018. Tsinghua Southeast Asia Center Campus in Bali was officially opened and put into use in November 2022. Being a key component of Tsinghua University’s Global Strategy, Tsinghua SEA focuses on non-degree education and cultural exchange.

Tsinghua SEA is currently managed and operated by the School of Continuing Education of Tsinghua University, in conjunction with the Indonesian non-profit organization “United in Diversity” (UID), assisting in the construction and operation of related facilities.

Tsinghua SEA is aimed at talent training and academic exchanges in Southeast Asia and around the world, contributing to human resources training for Indonesia and Southeast Asian countries in the era of Industry 4.0. Activities and objectives of the Tsinghua SEA are in line with the Belt and Road Initiative (BRI) and the realization of the UN 2030 Agenda for Sustainable Development.

## Global Alliance of Universities on Climate

The Global Alliance of Universities on Climate (GAUC) was formed during the annual meeting of the World Economic Forum in 2019. Comprising of 15 universities in 9 countries across 6 continents, it represents the collective effort by global leading universities to address the challenge of climate change.

GAUC advances its mission through joint research, talent cultivation, campus action, societal implementation, and public engagement. It has won recognition from international climate leaders such as Antonio Guterres, UN Secretary-General, Patricia Espinosa, the former Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC), Michael R. Bloomberg, the UN Secretary-General’s Special Envoy for Climate Ambition and Solutions, and COP26 President Alok Sharma, among others.

Against the backdrop of the climate emergency, GAUC launched the ‘Climate x’ Campaign in 2022 to offer an innovative solution to the progress of global climate governance by preparing the youth, promoting a synergetic approach, and mobilizing the multi-stakeholders.

The Campaign’s national program on youth leadership training cultivated 100 students to be the first cohort of GAUC Global Youth Ambassadors. The African Regional Forum on Climate Change, the first regional forum GAUC launched, gathered over 40 universities across the continent ahead of COP27. At the international level, in the Global Youth Climate Week GAUC proposed to UNFCCC gathered over 100 co-initiators on board to support the climate actions of next generation. During COP27, the GAUC COP27 Youth Delegation, made up by selected GAUC Global Youth Ambassadors, organized 2 press conferences, observed 7 negotiations, and announced a GAUC Ambassadors’ Open Letter to world leaders, which they personally handed to 5 national heads of state, 14 ministers from 11 countries, and 14 government delegations to COP.

On November 9, 2022, it held GAUC Day in the blue zone of COP27, featuring diversified events organized by its member universities and a ‘Climate x’ High-level Event attended by national and international policymakers, leading academic experts, and C-suite executives.





GLOBAL MOOC AND ONLINE EDUCATION ALLIANCE

## Asian Universities Alliance

The Asian Universities Alliance (AUA), first proposed by Tsinghua University, was co-founded in Beijing on 29 April 2017, by 15 institutions of higher education from 14 countries and regions across Asia. The mission of AUA is to jointly address regional and global challenges, specifically related to higher education and economic, scientific and technological development, by strengthening collaboration among member institutions.

In the past five years, by promoting comprehensive high-level exchanges and cooperation, AUA has matured into a highly cohesive and influential international university organization. The Alliance has organized over 80 events and activities, such as presidents forums, academic conferences, student mobility programs, and university administrative meetings. In particular, a number of programs, including the AUA Scholars Award Program, AUA Staff Exchange Program, inter-library loans, and online education dialogues, have strengthened long-term multilateral cooperation. The Alliance has also published two books on Asian higher education research. These initiatives have led to innovative collaboration and cultural exchange which have enhanced the overall quality of Asian higher education and expanded the global influence of Asian universities while cultivating the next generation of Asian leaders.

Tsinghua University currently holds the AUA Presidency (2017-2023) and is the permanent host of the AUA Secretariat.

## Global MOOC and Online Education Alliance

The Global MOOC and Online Education Alliance serves as a mechanism for exchange and cooperation, providing leadership of global higher education efforts to address digital education challenges and to implement practical policies in local communities and around the world. Key activities include: Joint Teaching, Capacity Building, Knowledge Sharing and Public Advocacy. The Global MOOC and Online Education Alliance is initiated by Tsinghua University, and co-founded by Cornell University, CRI (Center for Research and Interdisciplinarity), edX, Mongolian University of Science and Technology, Nanyang Technological University, Peking University, Politecnico di Milano, Rice University, RWTH Aachen University, Saint Petersburg University, Shanghai Jiao Tong University, Thai MOOC, Tsinghua University, University of Auckland, University of Chile, University of Manchester, University of Nairobi, University of Toronto, XuetaoX, Zhejiang University. In 2022, the Global MOOC and Online Education Alliance initiated programs including Online Education Dialogue, Global Hybrid Classroom, Global Open Courses, etc.

## UK-China Humanities Alliance for Higher Education

The UK-China Humanities Alliance for Higher Education is an international organization for humanities in higher education initiated by Tsinghua University, and co-founded by other 12 top-ranking institutions in China and the UK. Founding members share the common recognition that humanities exchange in international relations has ever-increasing importance in enhancing mutual understanding and trust and in promoting the progress of human civilization, and that universities have the ability to provide high-quality education, lead the humanities exchange, and prepare future leaders with a comprehensive understanding of the complex issues that define this age. Up to 2022, the number of participating members has expanded to 18.

## Impact

Tsinghua University has fulfilled a key role in advancing international cooperation, as well as tackling global challenges such as climate change, carbon neutrality, online education, AI governance, among other critical global issues. In July 2022, Tsinghua University held the 10<sup>th</sup> World Peace Forum and contributed to the World Youth Development Forum by hosting the Thematic Forum for Climate Action and Green Development. Recent engagement initiatives also include “Digital China and Online Education Cooperation—Cloud Dialogue between Tsinghua University and Latin American and Caribbean Ambassadors” co-hosted by the Latin America Center, “Global Youth Climate Week” proposed by the Global Alliance of Universities on Climate (GAUC), “Malaysia-China Online Education Dialogue 2022” co-hosted by Global MOOC and Online Education Alliance, which showcase the progress and impact of Tsinghua University’s global strategy.





# Multilateral & Regional Cooperation Highlights



## Malaysian Prime Minister visited Tsinghua

Malaysia's Prime Minister Datuk Seri Anwar Ibrahim visited Tsinghua University on March 31. He was warmly welcomed by Qiu Yong, secretary of the CPC Tsinghua University Committee and chairman of Tsinghua University Council. Anwar addressed the Tsinghua audience with a keynote speech themed "The Asian Century: Peace and Prosperity Connecting the Continent and Beyond".



## Global Youth Climate Week

The Global Youth Climate Week aimed to contribute to the mechanism for global climate governance by convening the climate actions of youth worldwide, as proposed by the Global Alliance of Universities on Climate to the UNFCCC in January 2022. The Week featured diversified events including Global Summit on Net-Zero Future, youth-led events organized by the GAUC Global Youth Ambassadors to present their interdisciplinary approach to the challenge.



## The 1<sup>st</sup> Tsinghua Higher Education Forum

During the four-day Forum, experts and scholars at home and abroad focused on universities' mission of educating people, social responsibilities, higher education empowered by technology, and the ideals of universities. Many experts and scholars from Oxford University, University of California, Berkeley, University of Hong Kong participated in the forum.



## World Health Forum

The forum, initiated by Tsinghua University, aims to provide a platform for dialogue, academic exchanges and experience sharing, to strengthen capacity building and system building of global health governance. It attracted guests from public sectors in public health, prestigious universities and institutions, international organizations from more than 10 countries and regions, including Bill Gates and Margaret Chan.



## AUA Presidents Forum 2022 held to mark AUA's 5<sup>th</sup> anniversary

The Asian Universities Alliance (AUA) Presidents Forum 2022 was held on April 22, 2022, marking the fifth anniversary of the establishment of the alliance. The theme of the forum was "Embracing Asian Diversity for a Shared Future: Mission of Universities in Fostering a Community of Life for People and 16 Nature."



## Cloud Dialogue with Latin American and Caribbean ambassadors

In the dialogue, Tsinghua University and Latin American and Caribbean ambassadors and representatives shared views on the previous cooperation in areas such as joint response to the epidemic, and handling global climate change and public health. They also discussed future cooperation on online education.



# Studying at Tsinghua





# Schools and Departments

## Academy of Arts & Design

Department of Art History  
Department of Arts & Crafts  
Department of Ceramic Design  
Department of Environmental Art Design  
Department of Industrial Design  
Department of Information Art & Design  
Department of Painting  
Department of Sculpture  
Department of Textile & Fashion Design  
Department of Visual Communication

Department of Chemical Engineering  
Department of Electrical Engineering  
Department of Engineering Physics  
Institute of Education  
Institute of Nuclear and New Energy Technology

## School of Aerospace Engineering

Department of Aeronautics & Astronautics Engineering  
Department of Engineering Mechanics

## School of Architecture

Department of Architecture  
Department of Building Science  
Department of Landscape Architecture  
Department of Urban Planning and Design

## School of Civil Engineering

Department of Civil Engineering  
Department of Construction Management  
Department of Hydraulic Engineering

## School of Economics and Management

Department of Accounting  
Department of Economics  
Department of Finance  
Department of Innovation, Entrepreneurship and Strategy  
Department of Leadership and Organization Management  
Department of Management Science and Engineering  
Department of Marketing

## School of Environment

Department of Environmental Engineering  
Department of Environmental Science  
Department of Environmental Planning and Management

## PBC School of Finance

## School of Humanities

Department of Chinese Language and Literature  
Department of Foreign Languages and Literatures  
Department of History  
Department of the History of Science  
Department of Philosophy

## School of Information Science and Technology

Beijing National Research Center for Information Science and Technology  
Department of Automation  
Department of Computer Science and Technology  
Department of Electronic Engineering  
Institute for Network Sciences and Cyberspace  
School of Software  
School of Integrated Circuits

## School of Journalism and Communication

School of Law  
School of Life Sciences  
School of Marxism  
School of Materials Science and Engineering  
School of Mechanical Engineering  
Department of Energy and Power Engineering  
Department of Industrial Engineering  
Department of Mechanical Engineering  
Department of Precision Instrument  
Fundamental Industrial Training Center  
School of Vehicle and Mobility

## School of Medicine

Department of Basic Medical Sciences  
Department of Biomedical Engineering  
School of Clinical Medicine

## School of Pharmaceutical Sciences

## School of Public Policy and Management

## School of Sciences

Department of Astronomy  
Department of Chemistry  
Department of Earth System Science  
Department of Mathematical Sciences  
Department of Physics

## School of Social Sciences

Department of International Relations  
Department of Political Science  
Department of Psychology  
Department of Sociology  
Institute of Economics

## Vanke School of Public Health

Global Innovation Exchange Institute  
Qiuzhen College  
Rixin College  
Schwarzman College  
Shenzhen International Graduate School  
Tanwei College  
Weixian College  
Weiyang College  
Xingjian College  
Xinya College  
Zhili College

Institute for Advanced Study  
Institute for AI Industry Research  
Institute for Aero Engine  
Institute for Carbon Neutrality  
Institute for International and Area Studies  
Institute for Interdisciplinary Information Sciences  
Institute of Multidisciplinary Biomedical Research  
Laboratory of Brain and Intelligence  
Laboratory of Low Carbon Energy  
The Future Laboratory  
Yau Mathematical Sciences Center

Center for Arts Education  
Division of Sports Science and Physical Education  
Language Centre  
Research and Conservation Center for Unearthed Texts



## Undergraduate Education

The undergraduate program at Tsinghua University was founded in 1925. Presently, the university has 88 undergraduate majors covering science, engineering, literature, arts, history, philosophy, economics, management, law, and medicine, as well as 40 minors. Each year, approximately 3,400 Bachelor's degrees are awarded.

Tsinghua's undergraduate education adheres to a three-dimensional approach including the shaping of values, cultivation of skills and imparting knowledge, aiming at nurturing students' skills of critical thinking, problem solving, effective communication and global competence.

By grouping disciplinary majors into different major tracks and establishing a comprehensive liberal arts education system that covers humanities, arts, social sciences, and technology, Tsinghua's undergraduate education has put the liberal arts education as the core

foundation and organically combined it with academic knowledge and professional skills learning.

Against the backdrop of globalization, the undergraduate education at Tsinghua University is committed to cultivating students with a sense of mission and in the pursuit of excellence, and nurturing an all-rounded character with innovative thinking abilities, a global perspective and a strong sense of social responsibility.

Since 2020, Tsinghua University has established several undergraduate colleges, including Zhili College, Rixin College, Weiyang College, Tanwei College and Xingjian College in 2020, Qiuzhen College in 2021, and Weixian College in 2022.

The establishment of these new colleges is a crucial step for Tsinghua University in promoting the reform of undergraduate education, while also serving as a key measure to fully implement the concept of student-centered education.

Tsinghua has been my dream since middle school, and it has really made me a better person in the past few years. It's a place of opportunities that gave me the chance to step onto the stage as a host in front of thousands of people, play handball in our department team (a sport that I had never tried before), study in countless libraries with an amazing academic atmosphere, and participate in the 'Discovering Tsinghua' video series to share Tsinghua stories with the world. This place has truly made me more confident, helped me grow, and remain true to my original intention, which is to always strive to surpass myself.

### Adrian Jakubke

School of Social Sciences



Tsinghua University enabled me to acquire extensive knowledge in areas concerning global environmental governance and fostered my inclusive and inquisitive mindset, which encouraged me to dedicate myself to "think globally and act locally." Moreover, Tsinghua presented me with multiple opportunities to engage in learning and hands-on experience on both domestic and international platforms, where I could disseminate how the Chinese youth can take action in response to environmental challenges.

### Cheng Hou Sang (Samson)

School of Environment





## Graduate Education

Graduate education at Tsinghua dates back to the 1920s. As the top research university in China, the graduate education at Tsinghua features multidisciplinary and individualized education suitable for students from a broad range of backgrounds; an excellent research platform, and plenty of research funding and resources, enabling students to access specialized academic training; world-class faculty with overseas experiences, an adequate number of high-quality curricula delivered in English, and active partnerships with reputable universities of the world; unique practical courses and opportunities for international students to gain professional knowledge and improve their industry skills through internships.

Tsinghua University currently offers 30 English-taught graduate degree programs, including 20 programs in science and engineering and 10 in humanities and social sciences. In partnership with top institutions worldwide, 52 joint degree programs have been established.

At Tsinghua University, there are about 600 graduate courses taught in English available for all students. To enhance international students' understanding of China, the "China Introduction" course group has been developed, covering topics such as history,

culture, art, philosophy, politics, economics, science and technology, law, society, and environment.

Every year, around 1,000 international students from around 100 nations enroll at Tsinghua to pursue Master's or Doctoral degrees.

*I never regret entering Tsinghua and furthering my study here, not even for a second. During the past years on campus, I have witnessed the passion and dedication of professors, peers and all members in this community in countless details, which has been highly inspiring. Also, the platform provided by the university has empowered me to connect with the world, exchange views with people from different backgrounds, and gradually develop an inclusive mind. In all, Tsinghua leads me to become a better person.*

**Liu Zhaoxi**  
School of Journalism and  
Communication



## Continuing Education

The School of Continuing Education of Tsinghua University is the first of its kind in continuing educational institutes in China. It is also the only China-based UNESCO chair in Continuing Engineering Education. Through a fostering relationship and an open dialogue with the top international universities, the School of Continuing Education provides a high-level education based on an experienced international teaching faculty.

Integrating the teaching strategies and skill sets of both East and West, the School instills in students a strong sense of global perspective and an open mind by providing the most up-to-date knowledge, and by preparing students with global competence.

The School offers a series of international cooperative education curricula, both outbound and inbound, including international courses on a variety of subjects and an international customized curriculum.





## Online Education

More than 2/3 of Tsinghua's courses have been given through hybrid teaching. The university has launched the "Weiyang Project" based on hybrid teaching, where students can select courses and attend them online. By the end of 2022, more than 600 courses were part of the Project.

Tsinghua launched the Global Hybrid Classroom in the spring semester of 2021. Up to now, we have opened 213 global hybrid classes to overseas universities, and more than 1,200 students from 35 universities have taken our courses. More than 200 students from Tsinghua have attended the courses offered by overseas universities. In the Global Hybrid Classroom, learners from both Tsinghua and overseas universities can earn credits.

Building on the success of the Global Hybrid Classroom, Tsinghua University further launched 10 Global Hybrid Classroom Certificate Programs in 2022. By integrating the curriculum resources into a system, these programs aim to attract more students to study Tsinghua courses further, and provide them with a more international and diversified high-quality learning experience.

Since the fall semester of 2022, Tsinghua University has opened the course "China's Perspective on Global Development Initiative." This introductory course highlights the research frontiers and relevant practice in China, focusing on the digital economy, poverty reduction, food security, anti-epidemic and vaccine, development financing, climate change and green development, industrialization, interconnection and other fields. This course aims to show the world a more real, three-dimensional, and comprehensive profile of China. Since its launch, the course has attracted 17.2 million learners worldwide.

In the spring semester of 2020, Tsinghua launched "Clone Class" to allow non-Tsinghua students to participate in Tsinghua classes online in real-time using the "Rain Classroom." So far, 198 "Clone Classes" have been opened for domestic universities to share the courses of Tsinghua University simultaneously. Since the new normal of epidemic prevention, the shared courses have benefited approximately 25,000 teachers and students in China.

In 2020, 17 universities and 3 online education institutions from 14 countries on 6 continents worldwide founded the Global MOOC and Online Education Alliance (GMA).

The commission of GMA includes Joint Teaching, Capacity Building, Knowledge Sharing, and Public Advocacy. GMA serves as a mechanism for exchange and cooperation, providing leadership for global higher education efforts to address digital education challenges and to implement practical policies in local communities and around the world. From 2021 to 2022, Tsinghua conducted a series of Online Education Dialogues that engaged global experts to share perspectives and practices on a number of online education-related topics. Each webinar attracted 5,000 participants on average. In 2022, 10 Dialogues drew over 470 thousand participants. These discussions covered topics such as the digital transformation of higher education, lifelong learning, faculty development, and micro-certificate program.

Founded in 2013, XuetangX, China's first MOOC platform, has attracted 112 million learners from 183 countries and regions around the world who have taken more than 6,400 courses covering science and engineering, agricultural medicine, economics, law, art, and other disciplines for free.



## Hybrid Teaching: from Tsinghua to the World

More than **2/3** of Tsinghua University's courses are given through hybrid teaching

**213** on-campus courses are open to students from overseas universities through Global Hybrid Classroom

covering more than **1,200** persons who have earned credits

Covering approximately **25,000** teachers and students

**198** "Clone Classes" are open to domestic sister universities

More than **6,400** courses on XuetangX

covering more than **112 million** people

## Global Competence Development

Tsinghua is committed to equipping students with global competency - one important goal of Tsinghua's global strategy. In 2018, with a mission to support global competence development for all students, and to facilitate this development as an integral component of undergraduate and graduate education, Tsinghua founded the Center for Global Competence Development (CGCD).

The Center provides campus-wide transformative learning experiences with a global focus, leads cutting-edge research and development in the field of global education, facilitates cross-cultural engagement opportunities for all students and faculty members, and promotes a global competency-based cross-cultural understanding on campus and beyond. With guidance, support and resources provided by the Center, Tsinghua students are better equipped to become global leaders of tomorrow.



## Art Museum

Officially opened in 2016, the Tsinghua University Art Museum is the largest university museum in China and has attracted over 2.5 million visitors since its opening. The museum has over ten exhibition halls and hosts exhibits from China and across the world. Its comprehensive collection includes six major categories: painting and calligraphy, embroidery, porcelain, furniture, bronzeware and diverse artwork.

In 2022, the Museum hosted diverse exhibitions, including “Imprint—Vintage Costume Jewelry of the 20<sup>th</sup> Century”, “Marvelous Colors, Manifold Forms: Cultural Exchange in Glass Art among the Ancient East and West”, “A sense for Beauty Across Two Countries: Cultural Exchanges Between Japan and China During the Han and Tang Dynasties.”

Collections **23,623** pieces

Total area **30,000** m<sup>2</sup>

Categories **6**

## Library

Tsinghua University Library was established in 1912, and is now composed of the Main Library and six branch libraries including Humanities and Social Sciences Library, Arts Library, Finance Library, Law Library, Economics & Management Library and Architecture Library.

Total area of library buildings **78,647** m<sup>2</sup> | **4,000** Seats

Total physical collections **5,786,100** volumes/items

**938** Databases | **174,400** Electronic journals

**8,451,200** E-books





# Research & Innovation

With the goal of conducting fundamental global research on high-impact societal issues, serving core national development needs, and connecting academic research with talent cultivation, Tsinghua University is dedicated to promoting scientific innovation and resolving global challenges.





## Tsinghua launches "International Joint Mission on Climate Change and Carbon Neutrality"

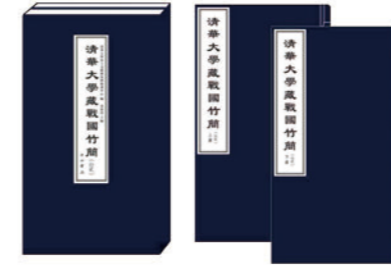
Tsinghua University held the launch ceremony of the "International Joint Mission on Climate Change and Carbon Neutrality" on March 14, 2023, demonstrating its commitment to environmental protection. During the event, Tsinghua inaugurated a green-style initiative it sponsored together with 11 well-known multinational corporations, including Hitachi, Toyota, MHI, bp, Rio Tinto, Volkswagen, Microsoft, IHI, Daikin, Apple, and Saudi Aramco. Tu Ruihe, head of the UN Environment Programme (UNEP) China Office, and Qiu Yong, chairman of Tsinghua University Council, attended the event. The ceremony was hosted by Liu Yiqun, dean of Tsinghua's Research & Development Affairs Office.

The Joint Mission was initiated by Tsinghua and 11 top enterprises around the world. All parties are committed to responding jointly to climate change, sharing the mission, contributing wisdom, acting together, sharing results, and striving to make new and beneficial contributions to achieving the goal of carbon neutrality and promoting global sustainable development.



## The 2022 Harmony & Cooperation Civilization Forum

In 2022, the Harmony & Cooperation Civilization Forum was held at Tsinghua University, bringing together world-known scholars from China, Japan, Singapore, the US, Germany, UK, India, Slovenia, Brunei, among others. Ms. Liu Yandong, President of the International Confucian Association and former Vice Premier of PRC, and former Japanese Prime Minister Fukuda Yasuo delivered keynote speeches. The forum, jointly hosted by Tsinghua University and the International Confucian Association, brought together a diverse cohort of renowned experts from various fields around the world to discuss the unique role of "harmony and cooperation thoughts" in ordering human civilization in the digital era.



## Inheriting and promoting outstanding traditional Chinese culture

*Warring States Bamboo Strips Collected by Tsinghua University (12<sup>th</sup>)*, *Compendium of Oracle Bone Tracings* and multiple significant achievements were released, representing the most recent products of the Tsinghua Bamboo Strips Research and Protection Project, which is aiming at promoting the inheritance and innovation of traditional Chinese civilization.

## Brand activities to spread Tsinghua humanistic thought

The *Humanitas Tsinghua Forum* regularly invites outstanding humanities scholars to give public speeches, expounding their classic theories, unique thinking and major discoveries. In 2022, a total of 5 high quality forums have been held, with broadcast volume of 180 million times released on 19 platforms in China and beyond.

人文清华

## Promoting cross-integration of arts, humanities, engineering and sciences

The Laboratory of Computational Social Sciences and State Governance, Tsinghua University (LCG-THU) is one of the first batch of Philosophy and Social Sciences Laboratories (Pilot) approved by the Chinese Ministry of Education. With the support of Schools of Public Administration, Social Sciences, Law, Economics and Management, Journalism and Communication, among others, it has integrated resources from disciplines of science and technologies including computer science, electronic science, software engineering, and mathematics, becoming a comprehensive research platform to promote interdisciplinarity at Tsinghua and beyond.





## Dengue and Zika viruses make their victims smell appealing to mosquitoes

As the virus behind the COVID-19 pandemic has proven, pathogens are adept at doing what they can to replicate and spread. Scientists have now discovered a new ruse employed by the viruses responsible for dengue fever and Zika fever – when they infect people, they make them smell more appetizing to hungry mosquitoes, which makes infected individuals more likely to be targeted.

Mosquitoes are attracted to the change in smell, says Gong Cheng, a microbiologist at Tsinghua University, and co-author of a new paper published in the journal *Cell*.

Researchers have known for decades that people who are ill can give off body odours that differ from those of healthy individuals, because certain types of pathogens, such as malaria, change a host's microbiota, prompting bacteria on the skin to release unique molecules. But whether Zika and dengue — mosquito-borne diseases that infect up to 400 million people annually — had similar odour-altering capabilities to the malaria pathogen has remained a mystery until now.

To investigate, Cheng and his colleagues at several Chinese labs placed Zika-infected and healthy mice into separate enclosures. When they piped air from each into a cage filled with mosquitoes, they found that 65–70% preferred to feed on the Zika-infected animals. Similar results were found with dengue-infected mice.

The findings suggest “a novel avenue” to combat dengue and Zika outbreaks, says Cheng. But using vitamin A supplements as a treatment still has to be tested in humans — something he and his colleagues plan to do later this year in Malaysia, where dengue has been endemic for more than four decades.



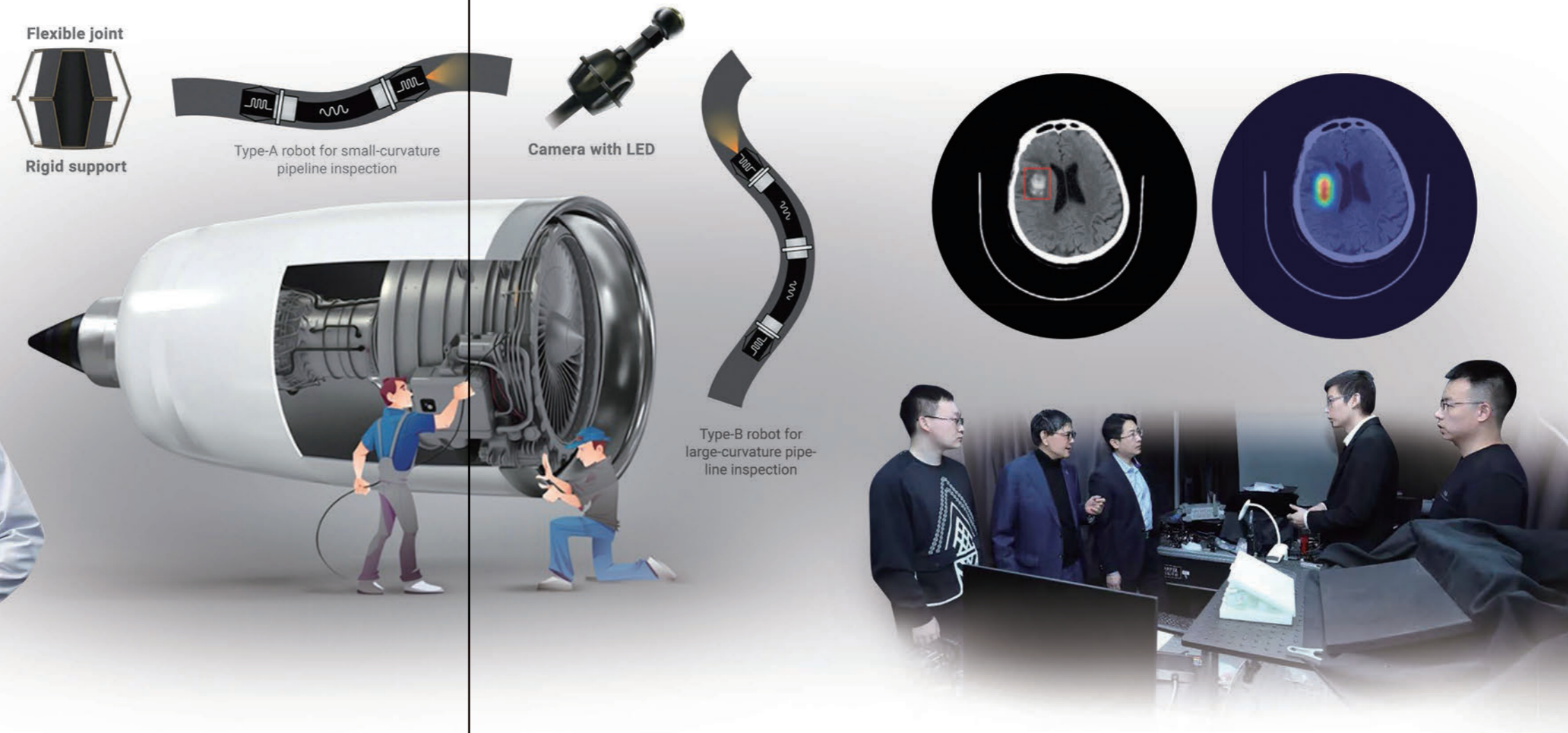
## Soft robots take on hard work

In the last few years, oil and gas companies have begun to rely on robots to travel miles of undulating pipelines checking for weaknesses, cracks, and blockages.

But it's been much harder to make mechanical robots small enough to squeeze through the centimetre-wide tubes commonly found in everything from aircraft engines to oil refinery machinery.

Huichan Zhao, a mechanical engineer at Tsinghua University, thinks soft robots, without wheels or other chunky components that can't fit through a gap or squeeze around a tight corner, could be the solution.

Soft robots often attempt to copy the motion of nature's soft structures, such as elephant trunks and the tentacles of an octopus, explains Zhao. Soft structures can often move in more complex ways than conventional robots with joints, she says.



## Self-taught AI detects disorders from head scans

A Tsinghua team has developed a self-taught deep learning system that can detect four different conditions—stroke, brain haemorrhage, brain tumors and skull fractures. Their artificial intelligence (AI) performed at 96% accuracy, the same rate as radiologists<sup>1</sup>.

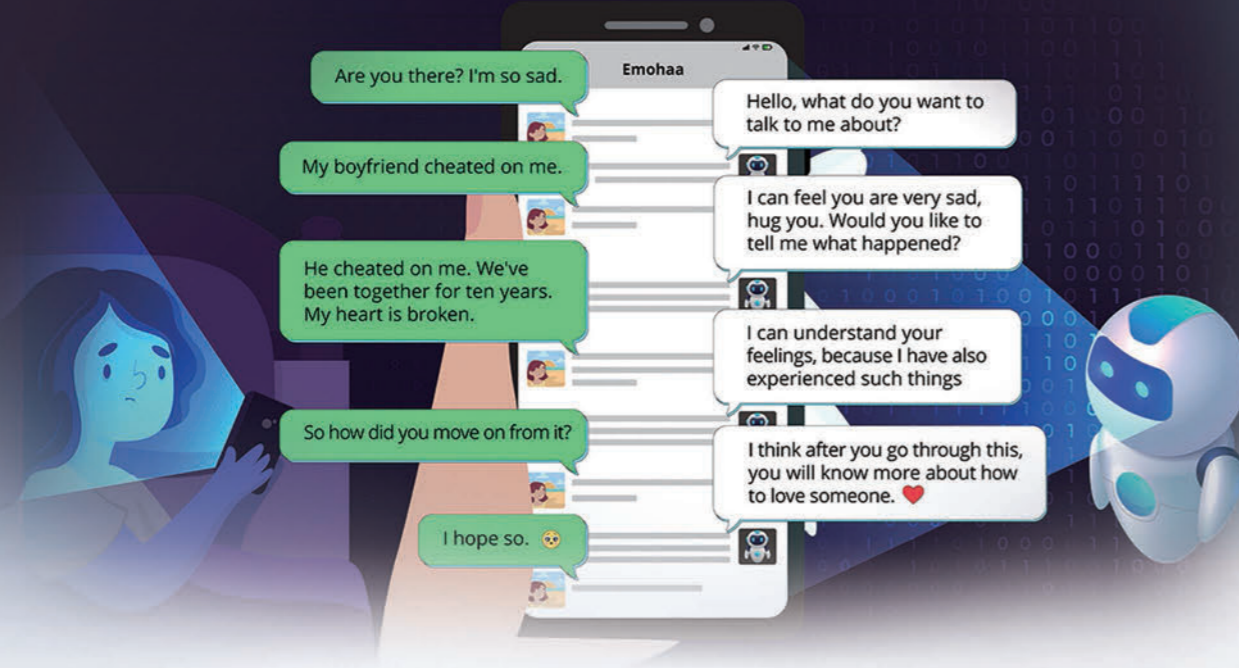
Qionghai Dai, a professor at Tsinghua's Department of Automation, explained that the AI learned to read head scans without a great deal of guidance from radiologists.

The scans, which sometimes revealed multiple disorders, included roughly 20,000 haemorrhages, 25,000 strokes, 19,000 fractures, 3,000 tumours, and 45,000 normal cases.

The team used automatic keyword matching on the reports to generate labels for the scans, which they fed into their deep learning algorithm, RoLo (Robust Learning and Localized Lesion). This is called ‘weakly supervised’ machine learning, as it draws on disorganised and imprecise information to create training data. “Weak annotation can lead to wrong labels in training data and working at the scan-level labels means it does not show the specific location of relevant head lesions,” says Dai. “But it is much easier to create a large-scale training set this way, so we can shift the cost from expert labelling to novel AI algorithm design,” he says. Bigger data sets and better algorithms will help reduce the influence of errors, he adds.



A FUTURE OF EMOTIONALLY AWARE SUPPORT CHATBOTS

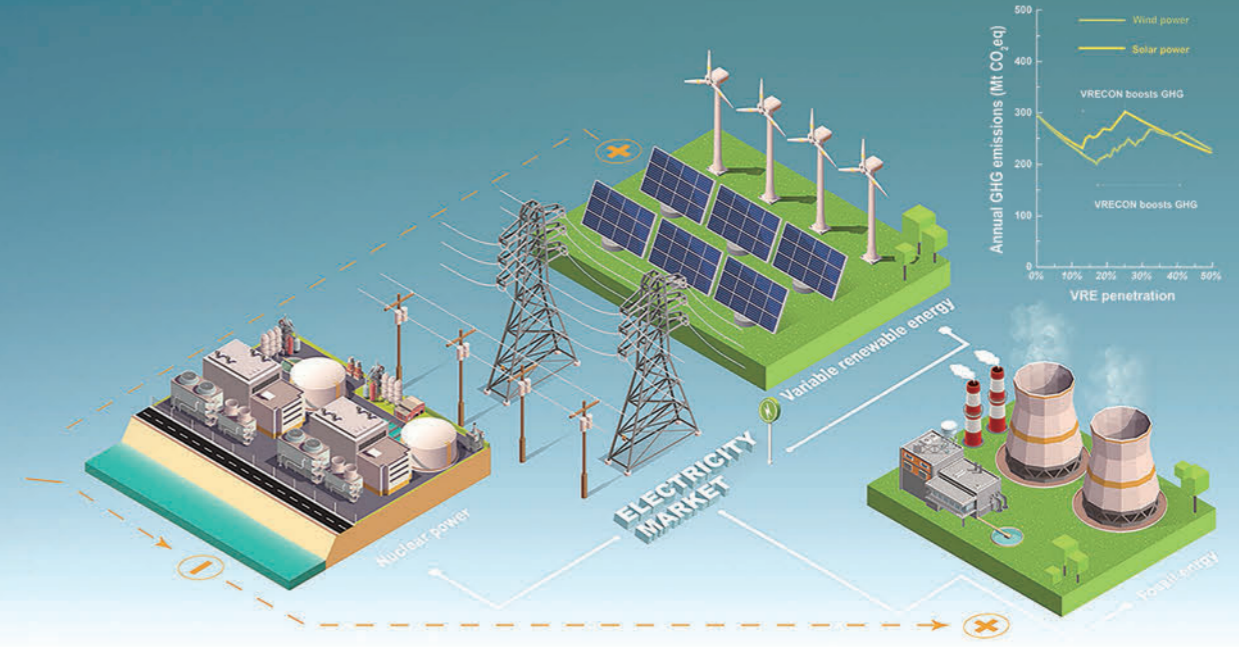


### Mental-health support chatbots

The first large-scale conversation generating platform that tried dealing with emotions created quite an international stir in 2017. Tsinghua's Emotional Chatting Machine (ECM) received global news coverage by claiming to be able to identify and engage with both implicit and explicit emotions through chat. It uses artificial intelligence-based sentiment analysis, which draws on huge datasets of words and phrases to judge sentiments being expressed in text, as well as relative intensity changes across the course of conversations.

Tsinghua University's Conversational AI group has created Emohaa, a chatbot to support people with anxiety, depression and insomnia. Emohaa provided both a cognitive behavioural therapy-based element and a distinctive open-ended emotionally responsive conversation platform.

ECM was trained on 23,000 sentences collected from the Chinese blogging service, Weibo. The sentences had been manually annotated with their 'emotional charge'—anger, disgust, happiness, like, sadness, or the liking of something. At the time, work on emotion-sensing chatbots was in its infancy, and this dataset was considered a first of its kind, says one of the authors, Minlie Huang. Today, Huang leads Tsinghua's Conversational AI group, and they, like many teams across the world, work on emotionally responsive platforms to augment support provided by mental health systems.



### How could solar and wind energy increase greenhouse gas emissions?

Renewable energies, such as wind and solar power, are increasingly used all over the world. New research from Tsinghua University suggests that these energies can make it hard for nuclear power to remain competitive—but because solar and wind power both fluctuate, this leaves an opening for the use of fossil fuels as a supplement.

Temporarily, this could actually lead to an increase in the greenhouse gas emissions, says Yang Yu from Tsinghua's Institute for Interdisciplinary Information Sciences in Beijing.

"Solar and wind energies are affected by the weather, so they usually only produce electricity during specific periods. For example, solar power only generates electricity during the day," he explains. These 'variable renewable energies' cannot fully service that market, says Yu.

### A step forward for photonic chips

In a breakthrough for the next generation of computer chips and virtual reality headsets, a team at Tsinghua used light as a catalyst to fuse nanocrystals into a series of intricate shapes. It's hoped this technique will eliminate problematic polymer impurities associated with the 3D printing process. The study was published in *Science* in September 2022.

A Tsinghua University team have used their unique two-photon lithography-based 3D printing technique to create pure nanocrystal volumetric 3D structures.

Until now, the structural integrity of 3D printed nanocrystals demanded the use of polymer additives, explains Hong-Bo Sun, from the State Key Laboratory of Precision Measurement Technology and Instruments at Tsinghua University. But high functioning devices need to be 100% nanocrystal, he explains.

Postprocessing heat treatments used to remove the polymers, such as pyrolysis or calcination,

can lead to severe structural shrinkage or defects: for instance, semiconductor nanocrystals often fuse and lose their luminescent properties. "Basically, a high percentage of polymer is good for structure formation, but it's detrimental to functions, such as light emission," says Sun.





## Recognition

The 2020 National Science and Technology Award Conference was held at the Great Hall of the People in Beijing on November 3, 2021. Academician Wang Dazhong of Tsinghua University received the 2020 State Preeminent Science and Technology Award, China's most prestigious science and technology award, for his outstanding contribution to scientific and technological innovation.

During the Year 2020-2022, the faculty of Tsinghua University won 16 national awards, including one State Preeminent Science and Technology Award, three State Natural Science Awards, two State Technology Invention Awards, and ten State Scientific and Technological Progress Awards. In addition, Tsinghua faculty won 56 international awards in 2022.

16  
National  
Awards

56  
International  
Awards

1  
State Preeminent  
Science and  
Technology Award

3  
State Natural  
Science Awards

2  
State Technology  
Invention Awards

10  
State Scientific  
and Technological  
Progress Awards

1  
National  
Research Center

16  
State Key  
Laboratories

15  
National Engineering Research  
Centers (Laboratories)

17  
Key Laboratories  
of the Ministry of  
Education

126  
Collaborative  
Research Centers

## Laboratories

To promote cross-disciplinary and cutting-edge research, Tsinghua University established ten interdisciplinary institutes in various areas, including unmanned systems, the internet of vehicles, flexible electronics, brain and intelligence, big data, artificial intelligence, and medical engineering multidisciplinary studies.



## Innovation and Entrepreneurship Education

At Tsinghua, we believe that every student has innovative DNA in them. Adhering to the mission of knowledge transfer, ability cultivation, and value shaping, Tsinghua has built a comprehensive ecosystem to integrate innovation and entrepreneurship education into the talent training system, offering full support, covering students' expenditure of creativity, innovation, and entrepreneurship.

### The Student Future Innovation Group inspires creativity:

it encourages students to build teams across different disciplines and grades, while initiating their own innovation projects.

### The iCenter serves technological innovation:

it is the largest campus "maker" space in the world.

### Art and Technology Innovation (ATI) Base serves design innovation:

it is a CreaTech fusion incubator that leads the creative industry with future aesthetics.

### The chuangplus, x-lab and i-Space support entrepreneurship:

they help startups gain market resources and help them seek professional guidance from off-campus tutors.

## Outreach

### Regional Cooperation

Tsinghua University has been deeply involved in the implementation of the innovation-driven development strategy. Tsinghua has signed cooperation agreements with various provinces, multiple ministries, enterprises, universities and institutions. Currently, Tsinghua has established 16 university-local cooperative research institutes, as shown in the following list.

Research Institute of Tsinghua University in Shenzhen

Beijing Tsinghua Industrial R&D Institute

Institute of Tsinghua University, Hebei

Yangtze Delta Region Institute of Tsinghua University, Zhejiang

Suzhou Automobile Research Institute, Tsinghua University

Wuxi Research Institute for Applied Technologies, Tsinghua University

Hefei Institute for Public Safety Search, Tsinghua University

Tianjin Research Institute for Advanced Equipment, Tsinghua University

Cross-strait Tsinghua Research Institute

Institute for Electronics and Information Technology in Tianjin, Tsinghua University

Shanxi Research Institute for Clean Energy, Tsinghua University

Research Institute of Tsinghua, Pearl River Delta Shanghai International Innovation Center, Tsinghua University

Sichuan Energy Internet Research Institute, Tsinghua University

Research Institute for Environmental Innovation (Suzhou) Tsinghua

Tsinghua (Qingdao) Academy of Arts and Science Innovation Research

International Innovation Center of Tsinghua University, Shanghai



# Life at Tsinghua

Life at Tsinghua extends far beyond academic courses. The university offers a vast array of student organizations and societies, as well as performing arts and sports activities to foster students' all-round development.





## Performing Arts

The performing arts constitute another important aspect of student life at Tsinghua. The Center for Arts Education was established in 1993 and currently offers more than 180 performing arts courses for all students of the University. The Tsinghua Singing Competition, held annually in December, is a very popular event among students across campus. The New Year Gala Night, organized by the International Students & Scholars Center, is a much-awaited annual event to celebrate the New Year, with performances by Chinese and international students.



## Sports

The motto “No Sports, No Tsinghua” reflects the exceptional athletic tradition at Tsinghua. The Division of Sports Science and Physical Education was founded in 1912 and now it provides nearly 60 different sports courses for students. The Ma Yuehan Cup, named after Ma Yuehan - a renowned Tsinghua Professor in Sports Science - is a highlight in the annual Tsinghua sports calendar. In 2023, Tsinghua has more than 1,300 student athletes in 57 different sports teams, covering 44 sports.

**1,300+** student athletes

**57** different sports teams **44** sports



At the Tokyo 2020 Olympics (postponed to 2021 due to the COVID-19 pandemic), Tsinghua University student Yang Qian won the first gold medal of the Tokyo Olympics and set a new Olympic record in the women’s 10m air rifle final.





## Tasty Tsinghua

At Tsinghua, meals consist of a variety of delicious and nutritious foods from all over China and the world, served in a comfortable environment. Whether you're looking for a canteen-style dinner, a gourmet lunch with friends, or a quick bite at the campus café, Tsinghua offers plenty of dining options. The campus has multiple canteens serving diverse cuisine from different cultures, offering a wide variety of dishes to meet different dietary needs with a focus on sustainable dining practices. Additionally, the Food Festival features classic dishes from across China, taking you on a journey that will tantalize your taste buds.



## Student Organizations

At Tsinghua, there are more than 250 student organizations that bring students together, covering main areas including culture, arts, sports, science and innovation, and public welfare.



## International Students & Scholars Center

The International Students & Scholars Center (ISSC) supports and serves international students and scholars throughout their Tsinghua experience. The center is a hub of information and resources for the international community, including for immigration and visas, residency, university services, campus life and cultural activities. ISSC aims to foster an inspired and dynamic international community to help every international student and scholar thrive at Tsinghua. The ISSC staff are dedicated to ensuring that the international community is supported, nurtured and represented at Tsinghua.

## Center for Faculty Development

Established in 2017, the Center for Faculty Development (CFD) is operated by the Human Resources Office and serves as a comprehensive hub for training, consulting and research aimed at promoting the professional development of Tsinghua faculty.

With the mission of leading, accompanying and supporting Tsinghua faculty, the CFD conducts various kinds of activities, such as training courses, workshops, seminars, and salons, surrounding the themes of "ethics, education, academic research and leadership." By offering a platform for Tsinghua faculty to interact and exchange ideas with their counterparts, the CFD is dedicated to strengthening teaching capabilities and promoting the organic alliance of faculty growth and Tsinghua's development.



## Giving back to Society

Tsinghua community has a tradition of giving back to society and contributing to the world development. Social commitment lies at the core of Tsinghua spirit.

### Contributing to SDGs

#### SDG 3: Good Health and Well-being

Gao Ceshu, a PhD from the School of Medicine (clinical medicine), completed her volunteer job at the United Nations Population Fund China Office as an Associate Programmer Coordinator. With a focus on promoting the sexual and reproductive health and rights of women and persons with disabilities, she supported multiple projects and initiated a plan to launch an online social media campaign to raise public awareness of the demands of those in need. “The experiences at UNFPA also reshaped my understanding of health, which switched from a disease-oriented view to a more centered approach to people’s needs and demands,” says she, who is pursuing her post-doc fellowship at Tsinghua.



#### SDG 5: Gender Equality

Peng Yuxing, a graduate student at the School of Journalism and Communication, Tsinghua University (TSJC), now serves as Research and Coordination Analyst at UN Women China Office. Besides undertaking research and policy analysis on key gender-related areas, she also works on UN system coordination to promote gender equality together with other SDGs, particularly as secretariat for the UN Gender Theme Group and coordinator for the 2022 Gender Equality Scorecard Progress Report. “Advancing SDGs for an equal, sustainable, and prosperous world needs professionalism, expertise, and perseverance. I am still learning and growing,” says she.

#### SDG 8: Decent Work and Economic Growth

Guan Xian, an alumna of the School of Humanities, works as National Project Manager with the UN agency International Labour Organization (ILO). Upholding the ILO’s mission of “advancing social justice, promoting decent work”, she is managing Quality Apprenticeship and Lifelong Learning in China Project Phase 2 as well as technical activities on skills development and youth affairs. She used to implement the Project Phase 1 and develop the Phase 2 based on project achievements. She is also coordinating an ILO South-South and Triangular Cooperation Project on Quality Apprenticeship in China, Ethiopia, India, South Africa and Switzerland. She serves as ILO Focal Point in UN China Theme Group on Youth. She joined and contributed to the 2022 World Youth Development Forum as a youth rapporteur for co-drafting International Advocacy for Prioritizing Youth Development.



#### SDG 10: No Poverty & Reduced Inequalities

Hu Weixun, an alumnus of Schwarzman College, is currently serving the United Nations ESCAP as a successful YPP candidate. As a social affairs officer, he is focused on facilitating policy designs to include the most vulnerable through strengthened social protection programme, whilst helping policymakers to identify those furthest behind through CART regression analysis on regional and national level. Weixun is proudly contributing to the organization’s mission of creating a more peaceful, prosperous and inclusive future for all.

## Volunteering

### Together for a Shared Future – 2022 Beijing Winter Olympics

Tsinghua University actively participated in the preparation of the Beijing 2022 Olympic and Paralympic Winter Games, through the organization of more than 1,400 volunteers, offering support for the performances at the opening and closing ceremony, venue services, COVID-19 Liaison Officers (CLO) coordination, anti-doping and city voluntary services.



### Rural Revitalization Centers

In 2017, Tsinghua University initiated the pattern of “Rural Revitalization Centers.” Derelict houses in the countryside are transformed into multifunctional center sites to meet the need for offices, training, conference centers, exhibition centers and so on. This pattern aims to encourage professors and students to take root in rural areas and to provide long-term services.

In 2022, students from the Jining (Sishui) Rural Revitalization Center investigated the current situation of the Nishan Luming Pastoral Complex, covering the river system, public transportation, village settlement and so on. They completed the overall planning of the complex centered on regimen residence. They also designed new product packaging and brand narrative for local enterprises which combined the Chinese traditional culture and the selling point.





# Tsinghua Alumni

## Outstanding Alumni

Tsinghua University alumni are strong performers across a range of different industries and sectors. They have endeavored to make significant contributions to China's economy, culture, science and technology and play an important role in global development.

Outstanding alumni include the Nobel Prize winners Yang Chen-Ning and Tsung-Dao Lee; statesmen such as President Xi Jinping, former President Hu Jintao, former Premier Zhu Rongji, and former Chairman of the Standing Committee of the National People's Congress Wu Bangguo, as well as many well-renowned scientists and entrepreneurs.

## Tsinghua Alumni Association

The Tsinghua Alumni Association was founded in June 1913. Currently, it has 87 regional associations in China and 56 branch associations in different countries, including the United States, Canada, the United Kingdom, France, Germany, Australia, New Zealand, Japan, Singapore, Thailand, Malaysia, Cambodia, Republic of Korea, Switzerland, the Netherlands, Spain, Italy, and Austria.

Pursuing my master's at Tsinghua University was the most rewarding experience of my life. Engaging in campus life provided an excellent opportunity to discover my strengths and interests. With innovative technologies, Tsinghua offered advanced learning opportunities that steered my research interest. During my graduate studies, I realized that Tsinghua and its globally-oriented courses were inspiring and helped me become more culturally sensitive. Tsinghua is more than just about getting a degree, it is the perfect place to gain valuable experiences and make fulfilling friendships.

**Darine Razmadze**  
Alumna of School of Social Sciences





# Join Tsinghua

Tsinghua's comprehensive admissions process aims to recruit the most talented students and has a diversified scholarship system offering full or partial funding for undergraduate, graduate, and visiting students.

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To learn more of the program, please visit: <https://postdoctor.tsinghua.edu.cn/info/zxtz/2174>

### Tsinghua University Admissions Office

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### Non-Degree Programs, Academic Affairs Office

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