Southern University of Science and Technology

SUSTech
Southern University of Science and Technology

CONTENTS

VIRTUE | TRUTH | ADVANCE

THIS IS SUSTech

Southern University of Science and Technology (SUSTech) is a public university, founded in Shenzhen, China. SUSTech plays a major role in fostering collaborative endeavors within academia and beyond to address the grand challenges in our contemporary world. The university s goals are to be a world class research university; to cultivate outstanding and innovative talents, and to produce high impact research for society.

SUSTech was established in 2010 to serve as a model for higher education reform in the interest of modernizing China s national university system. It is anchored in virtue, truth and advancement whilst recognising that research, innovation and entrepreneurship are key attributes vital for socio economic development in our interconnected cities, regions and countries. As a reformative and global university, SUSTech is known for several innovations in China. Among them a modern governance system, a novel and comprehensive admissions system, use of English as the instructional language, and a curriculum rooted in innovation and entrepreneurship.

SUSTech's youth has been no barrier to its forming a string of prestigious partnerships across the globe. Together, we aim to leverage our partnerships to increase the connectivity between universities and cities, and to nurture our students as the next generation of leaders in science, engineering and management who will contribute to solving the challenges confronting our rapidly changing world.

明德求是 日新自强

VIRTUE | TRUTH | ADVANCE

In September 2021, SUSTech unveiled our new university motto. The couplet is comprised of four Chinese words: Mingde 明德, qiushi 求是, rixin 日新 and ziqiang 自強. Each word is drawn from one of three ancient Chinese texts: the Book of Rites, the Book of Changes and the Book of the King of Hejian. They symbolise the essence of the university and the spirit of SUSTechers as embodying the highest **virtue**, seeking **truth** from facts, **advancing** reform and renewal, and always striving for self improvement

VIRTUE | TRUTH | ADVANCE

Virtue Truth Advance

Fengliang Li

University Council Chair

After celebrating our 10th anniversary, SUSTech is beginning a new phase in our journey towards building an innovative research university. Rooted in China, SUSTech aspires to become a world class university through nurturing talents, advancing scientific discovery and technological innovation, and serving the needs of the both the nation and the local community.

Qikun Xue

President

SUSTech endeavors to become a research oriented university of tomorrow. We pursue excellence and dare to think unconventionally. Our focus on education, research and innovation will be the foundation of a truly prestigious university that is dedicated to addressing fundamental scientific questions and pressing social concerns.

SUSTech's 10th Anniversary Celebration Ceremony was held in the Runyang Stadium on Dec. 20th, 2020. The celebrations were attended by representatives from over 100 domestic universities, while presidents of international partner institutions sent congratulatory messages via video.

1300+
Faculty members
(600+ tenure)
650+ (2018)

4500+
Undergraduate students
4000+ (2018)

4550+
Graduate students
1400+ (2018)

28
Schools/ Departments
14 (2018)

35
Bachelor's degree programs
26 (2018)

1100+
Courses offered
600+ (2018)

$650m
Government appropriation
$420m (2018)

714,000m²
Gross floor area
270,000m² (2018)

VIRTUE | TRUTH | ADVANCE

KEY FACTS AT A GLANCE

2.5%
undergraduate admission rate

3.5:1
student-to-faculty ratio (undergraduates only) is among the lowest in the world

19
International Advisory Council members - leaders from world-class universities

3m
research grants per capita per year is around 3 million RMB, top in China

#1
No.1 young university in mainland China (THE and QS) and No.1 in the world among Rising Stars 2019-2020 (Nature Index)

THE WORLD UNIVERSITY RANKINGS

9th in Mainland China | **162nd** in the world

QS WORLD UNIVERSITY RANKINGS

13th in Mainland China | **275th** in the world

SHANGHAI RANKING

36th - 57th in Mainland China

301st - 400th in the world

U.S.News & WORLD REPORT

28th in Mainland China | **350th** in the world

AN AGENT OF CHANGE

At the forefront of:

- ✓ building a **MODERN** university governance system
- ✓ recruiting top **TALENTS** from across the globe as faculty
- ✓ innovating an advanced undergraduate **ADMISSIONS** system
- ✓ fostering **INTERNATIONAL**-standard bilingual education
- ✓ promoting high undergraduate **PARTICIPATION** rate in research
- ✓ implementing **CRITICAL** thinking pedagogy and scientific communication program
- ✓ close integration with **INDUSTRY**
- ✓ world-class research **FACILITIES** and equipment
- ✓ campus **INTERNATIONALIZATION**

RISING TOWARD THE FUTURE

The SUSTech campus is nestled in the northern hills of Shenzhen, providing a scholarly respite from the dynamism of the city. Spread across 2km² it offers a flexible living environment for all SUSTechers to learn, grow and flourish.

2021

College of Science

School of Business & Public Teaching Building

2020

SUSTech Convention Center

School of Humanities and Social Sciences

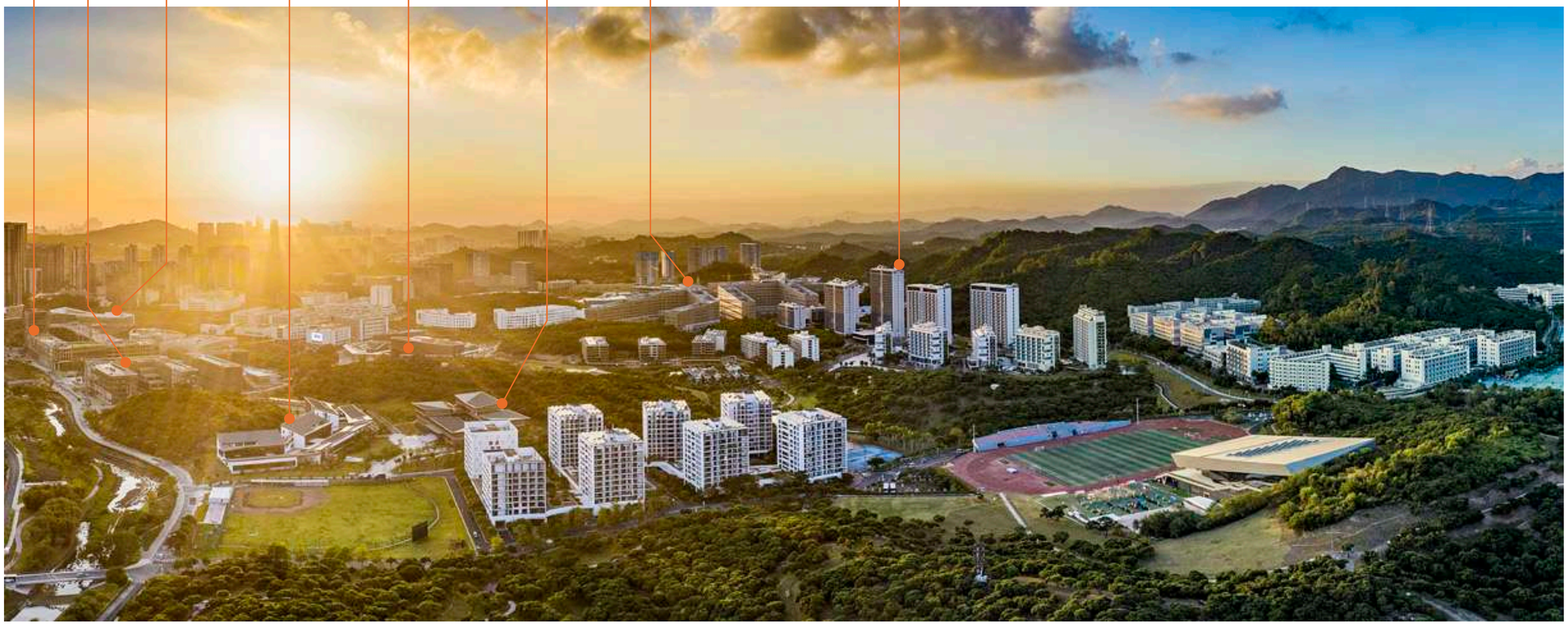
SUSTech Center & Yidan Library

Administration Building (New)

College of Engineering

2019

Student Dormitories



THE GREATER BAY AREA

Total area: **56,000 km²**

Total population: **86m+**

GDP: **USD 1.6tn** (2020)

The Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area) comprises the two Special Administrative Regions of Hong Kong and Macao, and the nine municipalities of Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing in Guangdong Province.

A vibrant world-class city cluster

- An international innovation and technology hub with global impact
- A quality living circle for living, working and travelling

Shenzhen

- 40 years to go from 31,000 people to **17 MILLION**
- Average **AGE**: 33
- Over **95%** of the population is originally from outside Shenzhen
- **INTERNATIONAL** residents drawn from 127 countries/regions
- Most **SKYSCRAPERS** above 200m tall of any city in the world
- **NO. 5 ASIAN CITY** in terms of Gross Domestic Product (GDP)
- Highest **GDP PER CAPITA** in China since 2007
- Highest among Chinese cities in **PCT PATENT APPLICATIONS** since 2004
- Ranked 4th in the world for number of **BILLIONAIRES**
- Home to 25 of China's **UNICORNS** (start-ups valued at over USD$1bn)
- 70,000+ **HIGH-TECH ENTERPRISES** and start-ups
- 6th in the world for number of **AI COMPANIES**
- Being appointed in 2008 as a UNESCO **CITY OF DESIGN**
- **R&D** investment accounts for 4.93% of GDP
- 20% of China's **PhDs** have lived in Shenzhen
- **FOREST** coverage: 40% of urban area
- 1st city in the world to have a **100% ELECTRIC** bus fleet AND taxi fleet

Pillar industries

- Hi-tech
- Modern logistics
- Financial services
- Cultural services

Future industries

- 6G networks
- Deep-sea exploration
- Quantum tech
- BeiDou Navigation Satellite System
- Hydrogen energy

Strategic emerging industries

- New generation IT
- Bio-tech
- High-end equipment manufacturing
- New materials
- New energy
- Intelligent & new energy vehicles
- Energy-saving & environmental protection
- Digital creative

SHENZHEN'S INNOVATIVE CHAMPIONS

Founded in 1998, its subsidiaries globally market various Internet-related services and products, including in entertainment, artificial intelligence, and other technology. Tencent is the world's largest video game vendor, as well as one of the most financially valuable companies. It is among the largest social media, venture capital, and investment corporations. Its services include social networks, music, web portals, e-commerce, mobile games, internet services, payment systems, smartphones, and multiplayer online games. Since 2018, it has emerged as the most valuable publicly traded company in China, and among the world's top technology companies by market value.

Tencent

A global medical instrumentation developer, manufacturer, and marketer based in Shenzhen, China. Mindray designs and produces medical equipment and accessories for both human and veterinary use. The company is organized into three key business lines: Patient Monitoring & Life Support, In-Vitro Diagnostic Products, and Medical Imaging Systems. In 2008, Mindray was recognized as China's largest medical device manufacturer.

Founded in 1987, Huawei is a multinational technology corporation headquartered in Shenzhen, Guangdong, China. It is a leading global provider of information and communications technology (ICT) infrastructure and smart devices. Huawei has approximately 197,000 employees and they operate in over 170 countries and regions, serving more than three billionpeople around the world.

HUAWEI

A manufacturing company headquartered in Shenzhen, Guangdong, founded in 1995. BYD has grown to become a majormanufacturer of automobiles (most notably full-electric and hybrid cars, buses, trucks, etc.), battery-powered bicycles, forklift, solar panels and rechargeable batteries (mobile phone batteries, electric vehicle batteries and renewable bulk storage).

A genome sequencing company, headquartered in Shenzhen, Guangdong, China, founded in 1999 as a research organization to support the Human Genome Project. With businesses in more than 100 countries and regions around the world, BGI has established cooperation and partnerships with thousands of different organizations across multi-disciplinary research areas including medical health, resource conservation and judicial services. Today, BGI is actively participating in the fields of Cancer Research, Bio-sustainability and Personalized Medicine through a variety of subsidiaries and a global network of collaborators.

BGI华大 基因科技造福人类

DJI manufactures commercial unmanned aerial vehicles (drones) for aerial photography and videography. It also designsand manufactures camera gimbals, action cameras, camera stabilizers, flight platforms, propulsion systems and flight control systems. DJI accounts for around 70% of the world's consumer drone market as of March 2020.

A holding conglomerate whose subsidiaries mainly deal with insurance, banking, asset management, financial services, healthcare, auto services and smart city. The company was founded in 1988 and is headquartered in Shenzhen. Ping An ranked 7th on the Forbes Global 2000 list and 29th on the Fortune Global 500 list. The company is considered to be China's biggest insurer, and its market capitalization in 2021 making it the largest insurer in the Asia-Pacific.

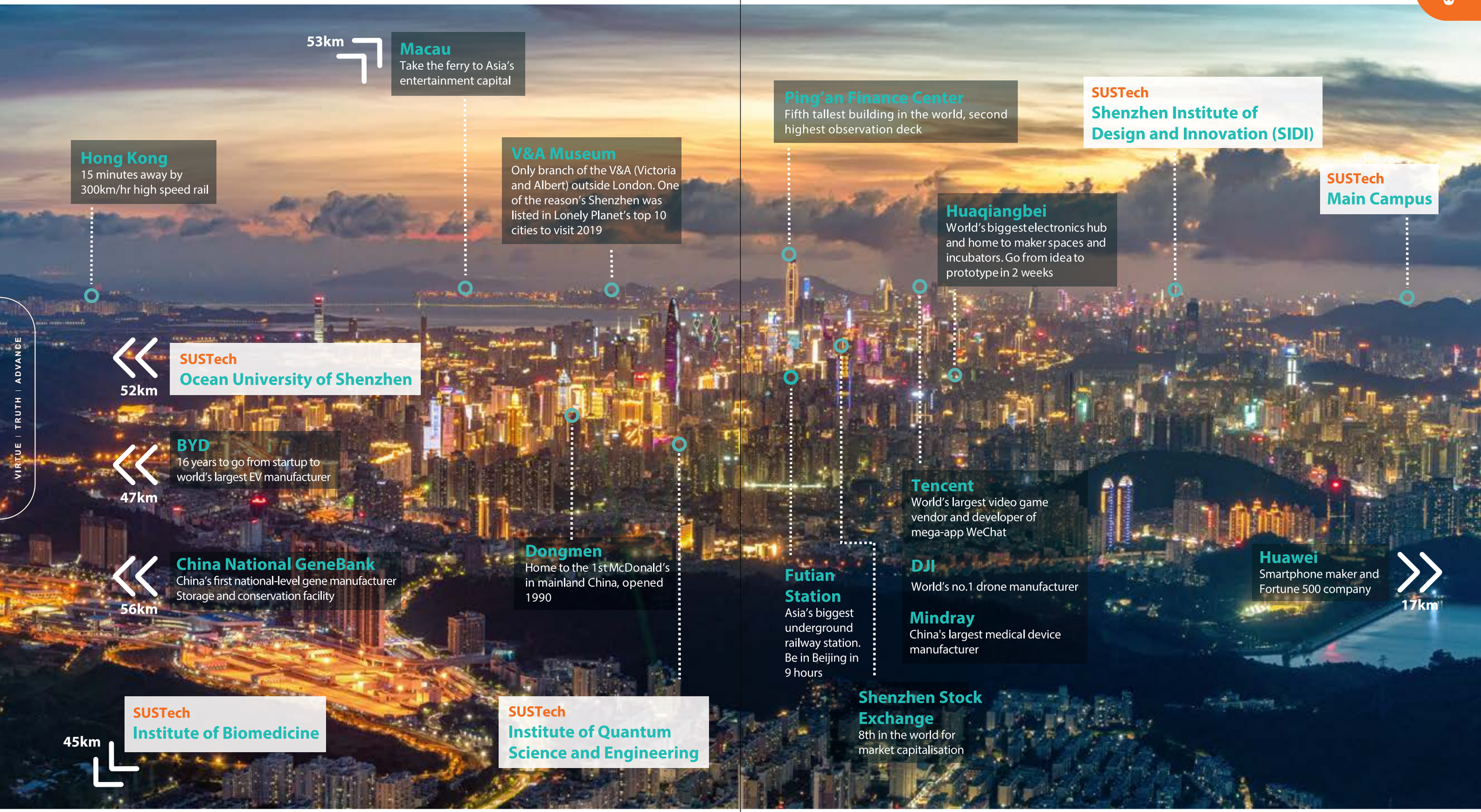
中国平安 PING AN

招商銀行 CHINA MERCHANTS BANK

CMB was founded in Shekou Industrial Zone of Shenzhen, the forefront of China's reform and opening-up. It is China's first joint-stock commercial bank wholly owned by corporate legal entities and the first pilot bank as China promoted reform in the banking industry with endeavors outside the government.

One of the world's largest real estate companies and ranked 208th in the Fortune Global 500, ranked 96th in the Forbes Global 2000 in 2020. Since its founding in 1984, Vanke has become one of the largest residential companies in China, expanding to over 60 cities across Mainland China and to overseas markets in the U.S., Singapore and London. As of 21 February 2019 its market cap is US$44 billion.

vanke


53km
Macau
Take the ferry to Asia's entertainment capital
Hong Kong
15 minutes away by 300km/hr high speed rail
V&A Museum
Only branch of the V&A (Victoria and Albert) outside London. One of the reason's Shenzhen was listed in Lonely Planet's top 10 cities to visit 2019
52km
SUSTech
Ocean University of Shenzhen
47km
BYD
16 years to go from startup to world's largest EV manufacturer
56km
China National GeneBank
China's first national-level gene manufacturer
Storage and conservation facility
Dongmen
Home to the 1st McDonald's in mainland China, opened 1990
45km
SUSTech
Institute of Biomedicine
SUSTech
Institute of Quantum Science and Engineering
Ping'an Finance Center
Fifth tallest building in the world, second highest observation deck
SUSTech
Shenzhen Institute of Design and Innovation (SIDI)
Huaqiangbei
World's biggest electronics hub and home to maker spaces and incubators. Go from idea to prototype in 2 weeks
SUSTech
Main Campus
Tencent
World's largest video game vendor and developer of mega-app WeChat
DJI
World's no.1 drone manufacturer
Mindray
China's largest medical device manufacturer
Futian Station
Asia's biggest underground railway station. Be in Beijing in 9 hours
Shenzhen Stock Exchange
8th in the world for market capitalisation
Huawei
Smartphone maker and Fortune 500 company
17km

Shenzhen & SUSTech

Miracle makers

1978
Reform & Opening Up policy implemented

1980
SZ Special Economic Zone established

1983
SZ University established

1986
Population : 1m

1987
Huawei founded

1990
- 1st McDonald's in China opens in SZ
- SZ Stock Exchange founded

1991
- Population : 2m
- Mindray founded

1995
BYD founded

1996
- Population : 5m
- Wal-mart opens its 1st store in China in SZ

1998
Tencent founded

1999
- BGI founded
- 1st China High-Tech Fair launches in SZ

2000
SZ University Town starts construction followed by Tsinghua and Peking U opening branches within it

2006
DJI founded

2007
SZ govt decides to create SUSTech

2008
Named UNESCO City of Design-SZ is the first Chinese city to join the Global Creative City Network

2009
- Population:10m
- Qingshi Zhu is globally selected as the founding president of SUSTech

2010
SUSTech established

2011
First class of 45 students enrolls

2013
SUSTech moves to new campus

2015
President Shiyi Chen assumes office

2018
SUSTech enters the THE rankings for the first time and ranks within the world's top 350

2020
- President Qikun Xue assumes office
- Reach Top 50 in the world in Nature Index
- SZ govt issues the Act of Tech Innovation
- SZ is positioned by the nation as the fourth national comprehensive scientific center

2021
- Population : 17m
- SUSTech's motto - Virtue, Truth, Advance - is announced
- Moves into world's top 200 in THE rankings

ACADEMIC STRUCTURE & MAJORS

VIRTUE | TRUTH | ADVANCE

College of Business

Department of Finance
- Finance
- Financial Engineering

Department of Information Systems & Management Engineering
- Big Data Management and Application

School of Medicine

Department of Medical Neuroscience

Department of Pharmacology

Department of Human Cell Biology and Genetics

Department of Biochemistry

School of Public Health and Emergency Management

- Clinical Medicine
- Biomedical Sciences

School of Humanities and Social Sciences

Center for Humanities

Center for Social Sciences

Center for Higher EducationResearch

Center for Language Education Arts Center

Center for Future Education

School of Innovation and Entrepreneurship

School of Design

College of Science

Department of Mathematics
- Financial Mathematics
- Applied Mathematics

Department of Physics
- Physics
- Applied Physics

Department of Chemistry
- Chemistry

Department of Earth and Space Sciences
- Geophysics

Department of Statistics and Data Science
- Statistics Data Science and Big Data Technology

Institute of Quantum Science and Engineering

Shenzhen Grubbs Institute

SUSTech International Center for Mathematics

College of Engineering

Department of Electrical and Electronic Engineering
- Opto-electronic Information Science and Engineering
- Communication Engineering
- Microelectronics Science and Engineering
  Information Engineering

Department of Materials Science and Engineering
- Materials Science and Engineering

School of Environmental Science and Engineering
- Environmental Science and Engineering
- Hydrology and Water Resources Engineering

Department of Ocean Science and Engineering
- Oceanography Offshore Engineering and Technology

Department of Mechanical and Energy Engineering
- Mechanical Engineering
- Robotics Engineering

Department of Mechanics and Aerospace Engineering
- Theoretical and Applied Mechanics Aerospace Engineering

Department of Computer Science and Engineering
- Computer Science and Technology
- Intelligence Science and Technology

Department of Biomedical Engineering
- Biomedical Engineering
- Intelligent Medical Engineering

School of Microelectronics (National Exemplary Institute)
- Microelectronics Science and Engineering

School of System Design and Intelligent Manufacturing Industrial Design

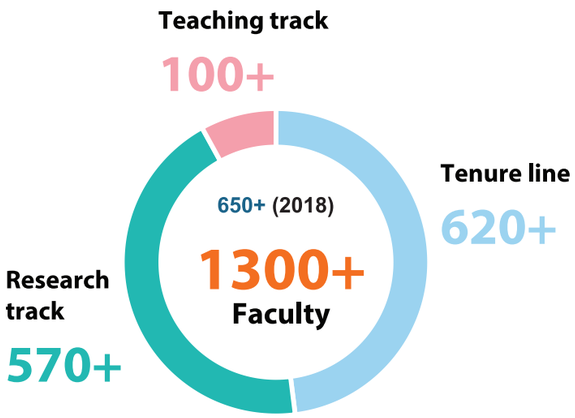
School of Life Sciences

Department of Biology
- Bioinformatics
- Biotechnology
- Biological Sciences

EDUCATORS & RESEACHERS

A vital community of academics, researchers, staff and students

Recognizing that at the core of a great university is a great faculty, SUSTech has assembled a team of scholars producing impact in research and delivering high quality teaching.



26 (12) (2018)

50

Members of academies
(30 full-time)

26 (2018)

49

Fellows of international societies

40%

of senior faculty are overseas citizens

95%

of faculty members have overseas study or work experience

60 scholars

listed among the World's Top 2% of Scientists

（1960-2019） by Stanford University's "updated science-wide author databases of standardized citation indicators".

Awards & honors in recent years

Xin Yao
Frank Rosenblatt Award 2020
Institute of Electrical and Electronics Engineers (IEEE)
(1st Chinese scholar to win this award)

Zhenzhong Zeng
Cross-Field Category, Highly Cited Researchers
Clarivate

Yusheng Zhao
Board of Directors
American Society for Materials Research (MRS)

Junguo Liu
Paul A. Witherspoon Lecture
American Geophysical Union (AGU)

Peng Wang
Claude S. Hudson Award in Carbohydrate Chemistry
American Chemical Society (ACS)

Liyuan Zhang
2020 Xplorer Prize
Tencent Foundation

The Xplorer Prize is a non-governmental, nonprofit and public benefit award designed and run by a select group of scientists. Recipient Liyuan Zhang is a researcher in quantum topology effect who joined SUSTech in 2014.

SUSTech won Shenzhen "Outstanding Talent Scout Prize" for the 5th consecutive year.

TALENT CULTIVATION

Nurturing responsible innovators

Education at SUSTech is student-centered and innovation-oriented. Inspirational, interactive and bilingual teaching are offered, with an emphasis on English learning, self study, critical thinking, academic writing and scientific communication.

All students have their own academic advisors and are encouraged to participate in lab research with the support of the institution's research teams, platforms and facilities from their first semester.

ARTINX Robotics Team

10:1
overall student faculty ratio

104
study abroad programs

100%
study abroad participation rate among undergraduates is our goal

40+
business partners for graduate education

16
international joint-PhD programs

#10
in China for THE Global Employability Ranking 2021

Undergraduate research database

Research opportunities are available year-round. The Undergraduate Research Program (URP) database catalogues research positions for students to apply for and gain hands-on, lab based experience in their chosen fields.

Academic advancement initiative

Each undergraduate student is given every opportunity to make their own proposal for research projects. Once a project is approved, the students have tutoring and financial support at their disposal.

Situated learning

All undergraduate students are required to undertake an internship and participate in research during the course of their studies. Students can join a high-level company in your home country or shoot for a Shenzhen giant like Huawei, Tencent, or DJI.

1st Prize	ACM SIGMOD 2021 Programming Contest
1st Prize	13th International Underwater Robot Competition
1st Prize	IEEE International Conference on Soft Robotics 2021
1st Prize	IEEE International Conference on Software Testing 2019
Gold	International Genetically Engineered Machine Competition 2019
2nd Prize	2020 International Competition of Autonomous Running Intelligent Robots
5th Place	2020-2021 ASC Student Supercomputer Challenge

UNDERGRADUATE EDUCATION

Shape your future

Undergraduate students study a broad range of STEM courses and are free to experiment within their first two years before declaring their major. Build your own curriculum, explore your interests across the sciences, and lay your cross-disciplinary foundation with SUSTech's liberal arts model.

Foundational courses

required for all undergraduate programs

Calculus I & II
Linear Algebra
General Physics I & II
General Chemistry
Introduction to Computer Programming
Introduction to Life Sciences
Fundamental Physics Experiments Lab
English
Chinese Language, History & Culture

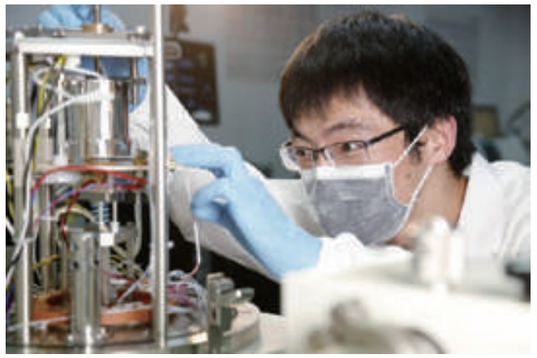
Elective Science Modules
Music & Arts
Social Sciences
Humanities

Major courses

once students declare their major, they complete required core courses and elective courses

Major Foundational Courses
Major Core Courses
Major Elective Courses

Undergraduate Thesis/Project
Research Projects
Internship



"SUSTech encourages students to participate in scientific research, thereby creating the conditions that have made me who I am today. I joined a laboratory group in my sophomore year which really helped me to find my interests. It was very much the first pot of gold I found along my academic path."

Yi Zhou

- Quantum Computation
- Science Fiction: Fiction and Film
- Applied Bioinformatics in Environmental Science
- Principles of Remote Design
- Evolutionary Computation and its Application
- MATLAB Programming and Application
- Cryptography and Network Security
- Chinese Aesthetics Philosophy | Intelligent Robotics
- Computational Fluid Dynamics
- Aerodynamic Analysis and Design of Aircraft
- Hydrology and Water
- Resources Practice
- Artificial Intelligence
- The Foundation of New Media Art Space Design
- CAD and | Engineering Drawing
- Applied Stochastic Processes
- Stories of Shenzhen
- Cell Biology Laboratory
- Introduction to Nanobiomedicine
- The Art of Elocution
- Biomedical Optics Laboratory
- Quantitative Investment Banking
- General Relativity: from Black Holes to Cosmology
- Deep Learning

"SUSTech gives us the freedom to explore many different fields of science before we decide which we would like to pursue for our major."

Zsombó István

GRADUATE EDUCATION

Integrating research, innovation and entrepreneurship

850+ (2018)
2500+
Master's students

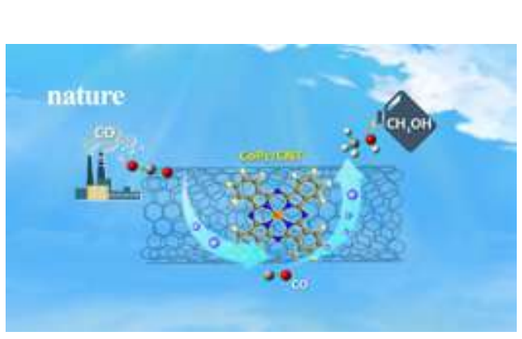
450+ (2018)
950+
Master's tutors

600+ (2018)
2000+
PhD students

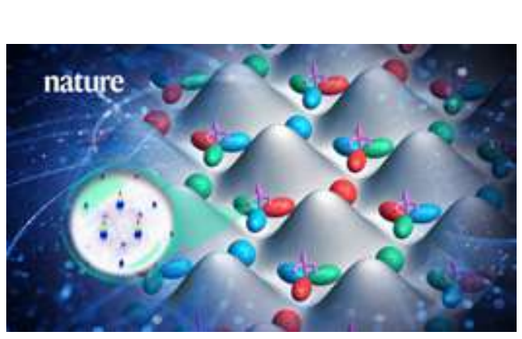
300+ (2018)
600+
PhD tutors

60% courses are taught in English

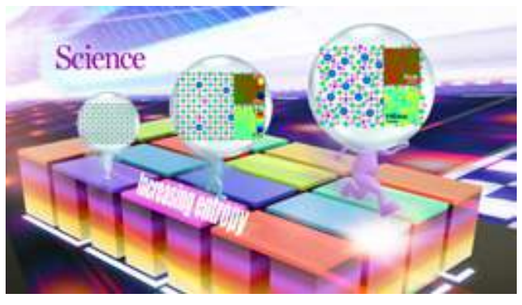
40+ industry partners for education



Domino electroreduction of CO2 to methanol on a molecular catalyst
Nature, 2019, 575, 639–642.
Zhan Jiang



Evidence for an atomic chiral superfluid with topological excitations
Nature, 2021, 596, 227–231.
Guangquan Luo



High-entropy-stabilized chalcogenides with high thermoelectric performance
Science 2021, 371, 6531.
Yong Yu & Juan Cui

Upward expansion and acceleration of forest clearance in the mountains of Southeast Asia
Nature Sustainability, 2021, 4, 892–899.
Yu Feng

SUSTech Department of Ocean Science and Engineering researchers at the Atacama Trench

"SUSTech Medical School helped me fall in love with medicine. I have to say that it is when you really realize what you are doing can make difference in the world that you can enjoy it even more. The School's faculty is comprised of fantastic mentors and they have provided patient guidance. With their help I've developed not just my skills but also as a person. The opportunity to attend myriad lectures and conferences during our studies has been an integral part of our learning process. I still remember the 18 th Chinese Biophysics Conference at which I was fortunate enough to be exposed to the leading edge research progress and directions."

Jingyue Xu

"What separates SUSTech from other universities in China is that as a young school, it has enough patience to help you succeed across all possible fields. It is especially suitable for young scholars who are interested in research, because there is a first class academic team, the most advanced lab equipment and the best supporting management structure. More importantly, it is a place full of hope for the future. The dream of growing together with Shenzhen and the Great Bay Area encourages everyone in the school to strive for their dreams."

Ming Yang

The first group of international students graduating
(photo taken in front of the Royal Palace of Phnom Penh, Cambodia)

International students at The Art Museum of Cantonese Opera in Guangzhou
(by Haiwen Xu)

Cross-Straits (Chinese mainland and Taiwan) Student Baseball League
(by Haiwen Xu)

SUSTech Nanshan Racing Team

RESEARCH FOR THE PUBLIC GOOD

Ten years of increasing impact

In China

MOST ADVANCED

Cryo-electron microscopy
Supercomputing

In the world

ESI 1%

Clinical Medicine
Environment/Ecology
Material Sciences
Engineering Chemistry

1500+ (2018)

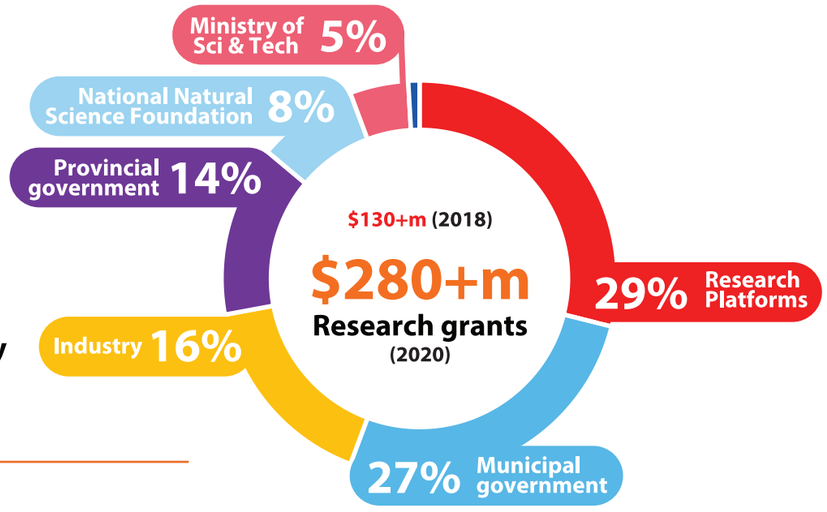
3400+

SCI papers
(2020)

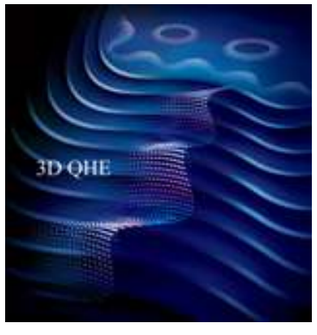
$350,000 (2018)

$500,000

research grants per capita
(2020)

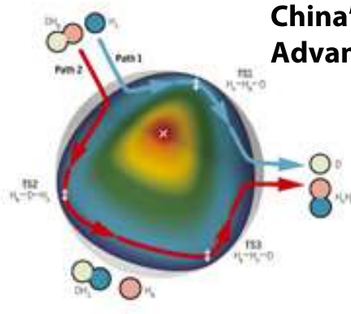


China's Top Ten Scientific Advances for 2019



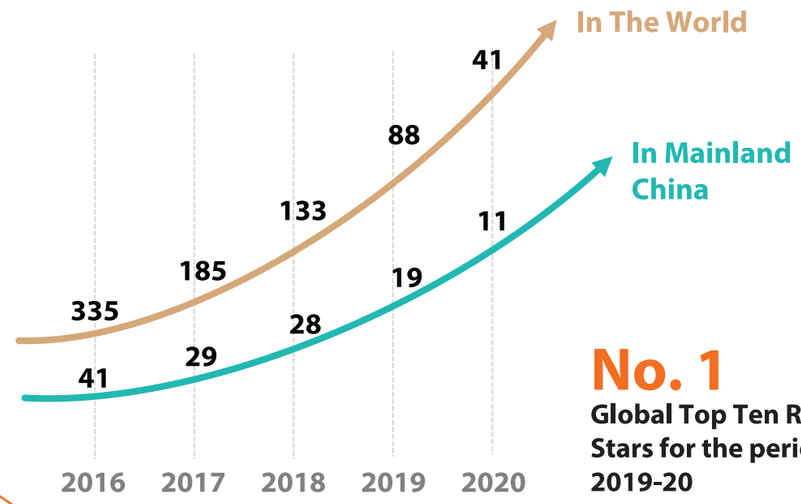
Experimental proof of the 3D Quantum Hall effect by Liyuan Zhang's team

China's Top Ten Scientific Advances for 2020



Experimental proof of quantum interference in chemical reactions by Xueming Yang's team

nature index



No. 1
Global Top Ten Rising Stars for the period 2019-20

SUSTech researchers joined **the fight against the Covid-19 pandemic**, producing **the first images of the virus morphology** in its native state via our cryo-electron microscopy center and exploring **the impact of the pandemic on atmospheric pollution.**

We are **pushing the boundaries of robotics** through capturing the world's **robotic fish speed record**, developing **novel artificial muscles** for insect-like robots designed to aid in disaster relief operations, or **testing smart gloves** to help patients with tactile dysfunction recover their sensation.

SUSTech teams are on the frontlines **climate change research and the drive to sustainability**, studying the **loss of forest** in southeast Asian mountain ranges, the impact of extreme temperatures on **tea cultivation**, and climate change's impact on **worldwide river flows.**

KNOWLEDGE TRANSFER

Catalyzing the regional innovation system

Being located in one of the innovation hubs of China, SUSTech contributes to the economic transformation and knowledge transfer of the Greater Bay Area and beyond. Driven by societal needs and improving the quality of human life, our research teams are deeply engaged with local industry and the regional innovation system.

16%
of research funding comes from industry

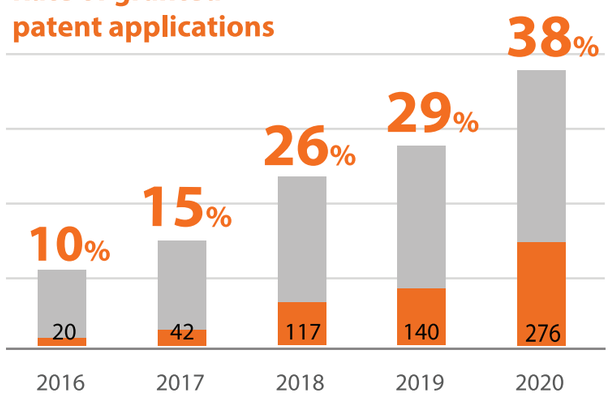
40+
business partners for graduate education

43
companies founded by SUSTech faculty

55
joint labs with:

Silver Star (robotics)
DJI (intelligent sensors)
ICube (High-performance GPU)
LEPU (medical technology)

Rate of granted patent applications



Life and Health

Apostle 南科征途

Improving the accuracy and efficiency of liquid biopsy -the testing of circulating free DNA (cfDNA) - in early cancer detection or other clinical applications.

Information Technology

Sitan Technology 思坦科技

Solutions for all practical issues in the process of Micro- LED technology development and industrialization, realizing mass production of Micro-LED.

Environmental Conservation

SUSTech Environmental 南科环保

Comprehensive management and pollution treatment of groundwater, soil and underground water, plus SpongeCity consultation service.

Advanced Manufacturing

Multifield Precision 迈菲精密

Precision processing (fine ceramic and titanium alloys) and advanced manufacturing technologies for new generation of 5G smart phones, smart wearable device and VR products.

Aerospace

SkyRover 创壹通航

Flight control and data processing algorithms for aerial robots applicable to space and marine exploration and smart city management.

Materials Engineering

Nanke Materials 南科新材

New generation of high-efficiency surfactant materials for anti-fog and cleaning solutions, including daily life, medical health, visual sensing, and modern agriculture.

New Energy

SouthernTech Fuel Cell 南科燃料

Research and development, production and sales of fuel cell electric reactors, membrane electrodes and bipolar plates, and fuel cell test service.

VIRTUE | TRUTH | ADVANCE

INTERNATIONAL DEVELOPMENT

A global university fostering impactful partnerships

International network

- Global partnerships (50% of partner institutions are within world's top 200)
- 45% of papers are international collaborative efforts
- International Advisory Council comprised of leaders from world class universities

International faculty

- Recruit talent from across the globe
- 95% of faculty have international experience
- 40% of senior faculty are overseas citizens

International education

- Bilingual instruction & learning
- High emphasis on academic writing & scientific communication
- Dual degree & study abroad programs

International campus

- International living conditions
- Highly selective recruitment process for international students
- Visiting scholars from around the globe

International reputation

- Pursuing academic excellence and impact
- High level international forums & seminars
- State of the art research facilities

Department of Earth and Space Sciences researcher Lei Fu joined the 36th National Antarctic Research Expedition to Zhongshan Station in the Larsemann Hills of East Antarctica.

Joint research / education platforms

Joint School of Medicine

This collaboration brings KCL's 800 year history and world renowned reputation in training doctors and medical professionals to the dynamic Greater Bay Area in China. It is the first of its kind in China for such close collaboration in medical education. The School aims to integrate science and engineering with medical education, offering a dual degree to SUSTech graduate students. The School will help establish the city of Shenzhen as the place to go to for high quality medical education, healthcare and cutting edge research.

Centers for Mechanical Engineering Research and Education at MIT and SUSTech

Each year, faculty members and students will have the opportunity to share their insights in joint workshops. Roughly a dozen graduate and undergraduate students from SUSTech will spend time at MIT annually. SUSTech faculty will be invited to observe MIT's approach to mechanical engineering education firsthand. Meanwhile, faculty and students from MIT will be invited to travel to Shenzhen and observe developments in the area's innovation ecosystem through a number of programs.

Joint Center for Neuroscience and Neural Engineering

The Center focuses on neurocircuit computation, regulating neurocircuits to restore function following stroke, neuromodulation, connectomics and neuromorphic computing. The mission of the Center is to combine multidisciplinary research teams to foster advances in Neuroscience and Neural Engineering that will dramatically increase the understanding of neuronal circuit computations, drive the development of next generation in silico computational devices, and enhance the quality of life of Chinese and Australians impacted by disease and damage of the nervous system.

Joint Research Center on Super Smart Cities

The Center focuses on the basic theoretical research of Artificial Intelligence, Big Data, Internet of Things, 5G and other advanced technologies related to smart cities and urban digitalization, as well as the application research oriented to major social needs, such as Urban Brain, Intelligent Transportation, Urban Emergency Response, and Urban Perception. In response to the covid 19 pandemic, the joint center developed the "Novel Coronavirus (CoVID 19) Transmission Modeling Prediction and Simulation Platform powered by flow Data and AI".

Institute of Risk Analysis, Prediction and Management (Risks X)

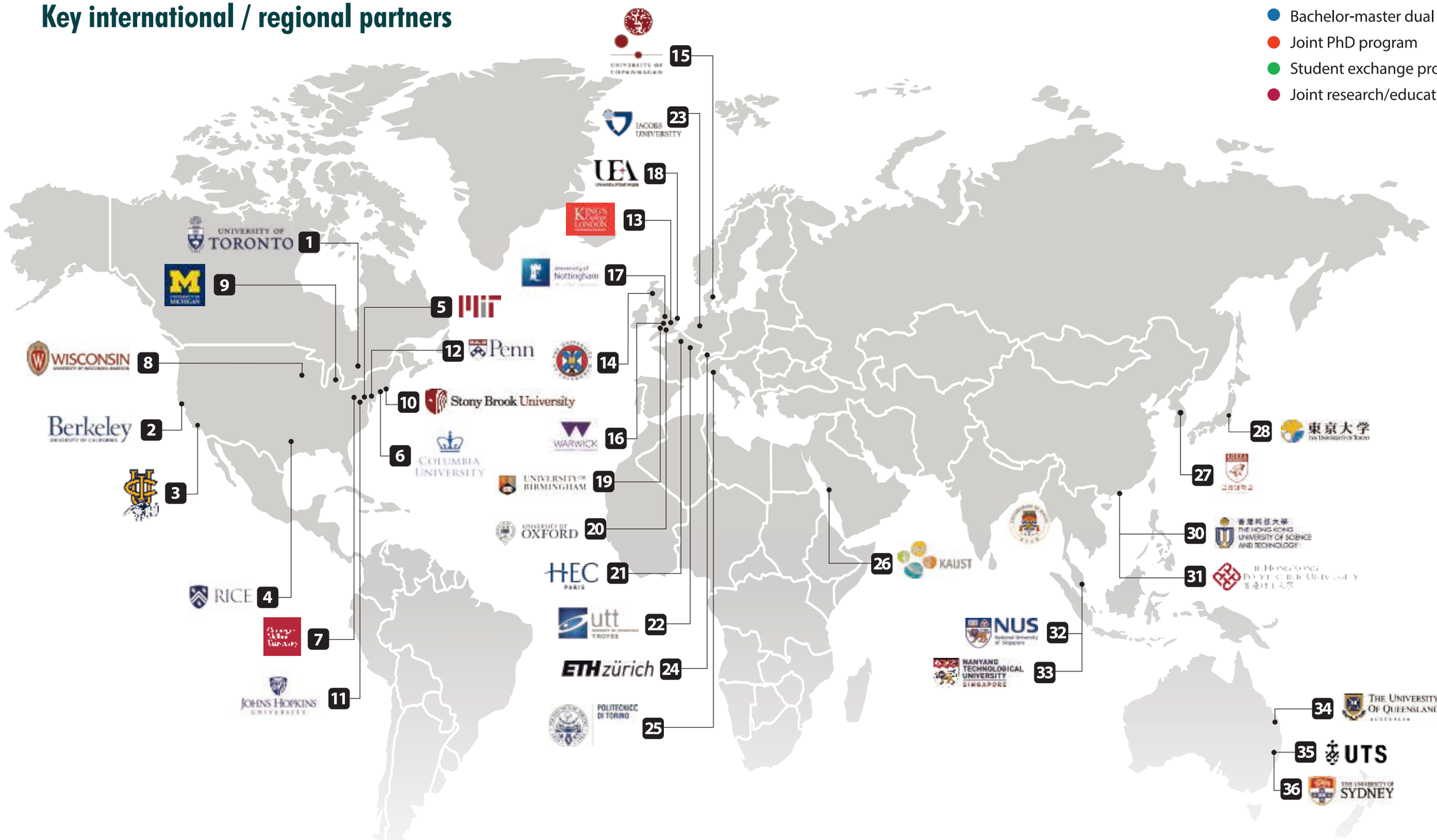
The Institute is committed to building a revolutionary dynamic risk management platform, with real time and dynamic monitoring of extreme risks in various system applications, simulations of future scenarios, analysis and prediction of risk trends, in order to help our society develop strong resilience and improve social responsibility. It uses rigorous data driven mathematical and statistical analysis to diagnose system instability, to study the predictability and control of extreme events in complex systems including financial and economic systems, natural disasters, energy security, epidemics and public health, major critical infrastructure, social dynamics and big data, block chain and cyber security.

Joint Institute for Global Management and Entrepreneurship

The Institute represents an alliance of SUSTech's academic expertise in scientific and technological innovation with HEC Paris' knowledge in economics, finance, management science, innovation, and entrepreneurship. The partnership will integrate both knowledge bases and partner networks to focus on the needs of international innovation and entrepreneurship platforms. It will also seek to cultivate managerial professionals for cutting edge technology centric industries for the industrial transformation of the Greater Bay Area whilst contributing to the technology-/innovation entrepreneurship ecosystem of the Greater Bay Area.

Key international / regional partners

- Bachelor-master dual degree
- Joint PhD program
- Student exchange program
- Joint research/education platform



1 UToronto ● 2 Berkeley ● 3 UCI ●● 4 Rice ● 5 MIT ●● 6 Columbia ●

7 CMU ● 8 UW-Madison ● 9 UMich ● 10 SBU ● 11 JHU ● 12 Upenn ●

13 KCL ●●● 14 Edin ●● 15 UCPH ● 16 Warwick ● 17 Nottingham ● 18 UEA ●

19 Birmingham ● 20 Oxford ● 21 HEC ●● 22 UTT ● 23 JU Breme ● 24 ETH ●●

25 UNITO ● 26 KAUST ●● 27 Korea ● 28 UTokyo ● 29 UM ●●● 30 HKUST ●●

31 PolyU ●●● 32 NUS ● 33 NTU ● 34 UQ ●● 35 UTS ●● 36 USYD ●

Taiheng Ren, one of the first participants in the MIT Exchange Program, representing MIT in the Hyperloop II competition held by Elon Musk's SpaceX

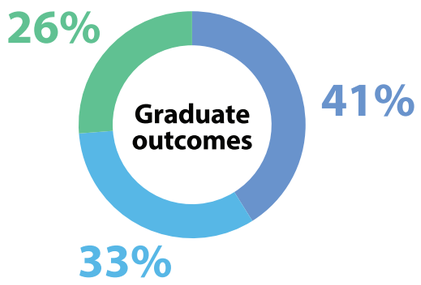
The 2019 DJI RoboMaster competition was co hosted by the School of System Design and Intelligent Manufacturing. The contest saw nearly 100 students from around the world study and compete at SUSTech for 21 days

Members of the International Advisory Council (IAC) visiting DJI's RoboMaster base in Shenzhen

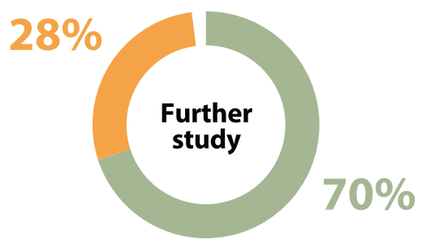
SUSTech held its first symposium for international partnerships on "Innovation and Collaboration: The Future of Research Universities in a New Global Era"

ALUMNI

A thriving global network of talent

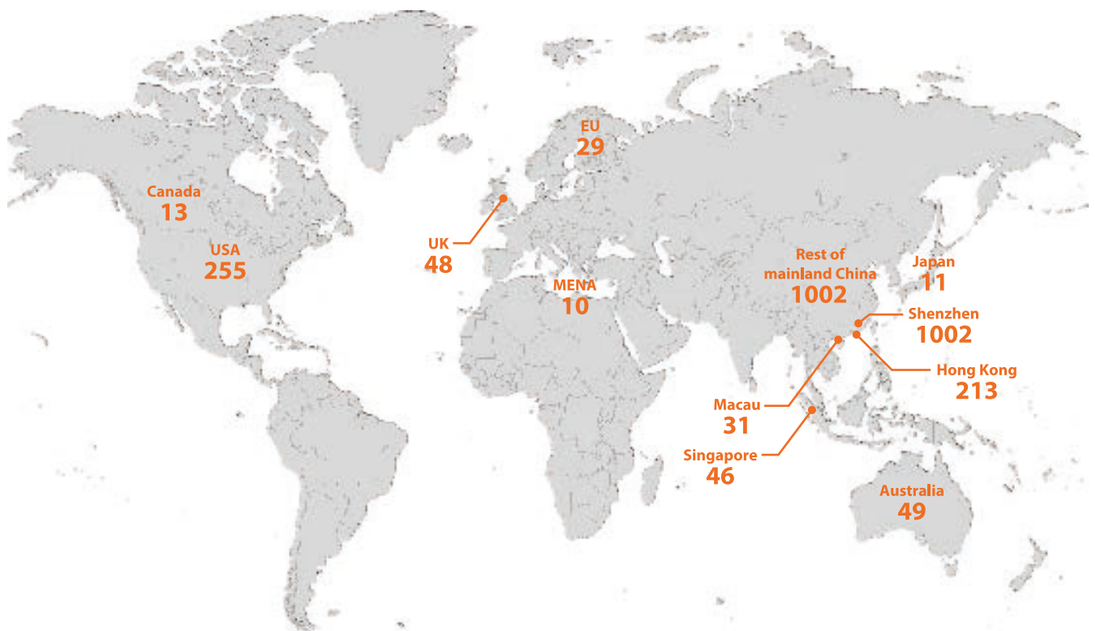


- Continue to study abroad and in HK & Macau
- Continue to study in mainland China
- Employed or self-employed



- Doctoral Degree
- Master's Degree

Since our first cohort graduated in 2015, SUSTech students have chosen future pathways across the world:



Tianzi Guo

The founder of Taizhou Seavan Technology Co,.Ltd.

"The moment we made that decision, we became SUSTechers with the adventurous spirit similar to that of entrepreneurs. We faced doubts and rumors about SUSTecher together, overcame the pressure, and proved them wrong with our achievements today. Before entering SUSTech, we were told in school to fall in line rather than follow our hearts. It's not easy to stay true to yourself, and I am glad that I have the support I need to become who I really am."

Jiale Wang

Forbes 30 Under 30 2021 ASIA
Currently works in HiSilicon
The first graduate in the history of SUSTech. He graduated from SUSTech in advance in June 2014 at age of, 17, and went to UK in pursuit of a doctoral degree at Oxford.

"After meeting so many people and experiencing so many things in my three year college life, I have formed a new understanding of many things and have set a better goal for myself. However, the most important treasure for me is that I've learned how to appreciate and cherish. I appreciate all the encouragement and help I've received and I cherish all my family and friends. Studying and living in Oxford for me is an extension of the life in SUSTech. With the basis laid in SUSTech, I will strive hard to continue its glory in Oxford."

Ziyi Zhang

A hostess of various national and international ceremonies, a medical care volunteer in Tibet.

"During my two years of studying at SUSTech, I have absorbed rich knowledge and experience of advanced interdisciplinary, which is a crucial step in my life. More importantly, I have increased my courage to face difficulties and my sense of responsibility to serve the society. As a PhD student in materials science, I am committed to scientific research and application related to human health, and gradually realize my career and ideal in the Greater Bay Area."

Zhi Zhang

One of the first undergraduate students to enter SUSTech. He chose an entrepreneurial path founding Shenzhen Nanke New Materials with Associate Professor Dazhi Sun, the first SUSTech established enterprise.

"I wanted to see my research results applied in real life. It is something I wanted to achieve when I first started to do experiments. I knew that I wanted to start a business because otherwise, I would only be researching a small part of the industrial production chain."