SUSTech Southern University of Science and Technology

SUSTech is a public research university, funded by Shenzhen city. Widely regarded as a pioneer and innovator in collectively moving China's higher education forward to match China's ever-growing role in the international arena, SUSTech aspires to be a globally-renowned university that contributes significantly to the advancement of science and technology by excelling in interdisciplinary research, nurturing creative future leaders and creating knowledge for the world. Located in Shenzhen, one of the fastest growing cities in China and the country's window to the world, SUSTech enjoys strong connections with leading companies in China and renowned universities around the world.

OUR STRATEGIC GOALS

STAGE 1
2015-2020

LAYING THE FOUNDATION

Benchmark for disciplinary establishment, with significant progress to be made in targeted fields toward national leadership.

STAGE 2
2020-2025

BUILDING EXCELLENCE

Become one of the first-tier and distinctive universities in China.

STAGE 3
2025-2049

REACHING FOR GLOBAL IMPACT

Achieve all-round development and global impact for a truly great SUSTech.

ROOTED IN CHINA, STRIVING FOR A WORLD-CLASS UNIVERSITY

Research

Innovation

Entrepreneurship

MISSION

Service	To serve the needs of innovation-oriented national development
	To serve the needs of building Shenzhen into a modern, international and innovative city
Reform	To lead higher education reform in China and serve as a testing ground for building excellent research universities through innovation
	To serve as a model for reforming the education system and modernizing the national university system

GOAL

01	To be a world-class research university
02	To cultivate outstanding and innovative talents
03	To achieve internationally excellent research outcomes
04	To support the sustainable development of Shenzhen, Guangdong and the whole country by advancing knowledge and promoting the application of science and technology

ACADEMIC DISCIPLINES

2016

10 bachelor's degree programs approved

2017

5 bachelor's degree programs approved

2018

4 doctoral degree programs, 6 Master degree programs and 1 Professional master's program approved

SUSTech has become the fastest in China to obtain the right to award the bachelor's degree.

SUSTech has become the Chinese university that needed the least amount of time to obtain the right to award the doctoral degree.

Doctoral degree programs

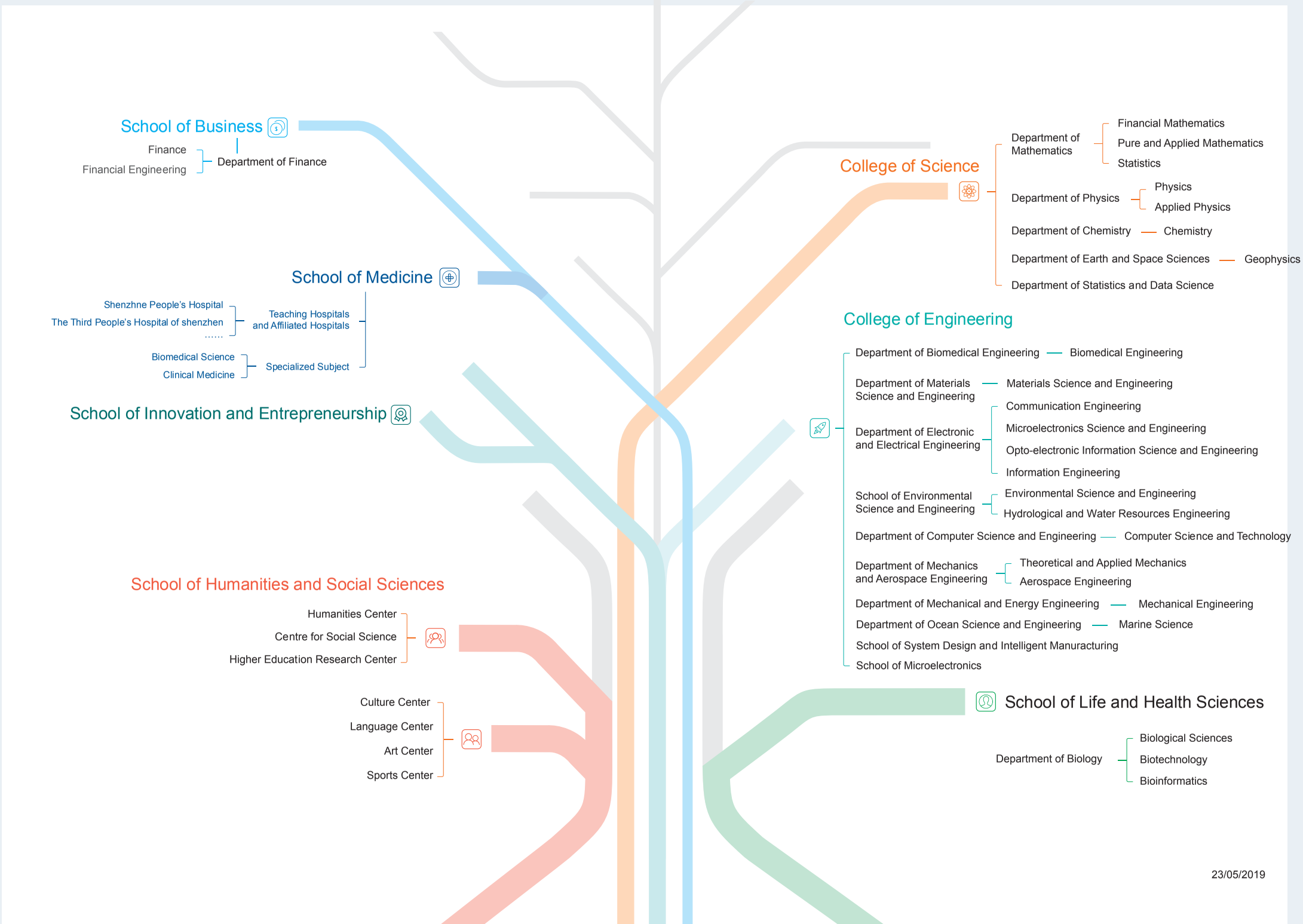
- Mathematics
- Physics
- Biology
- Mechanics

Master degree programs

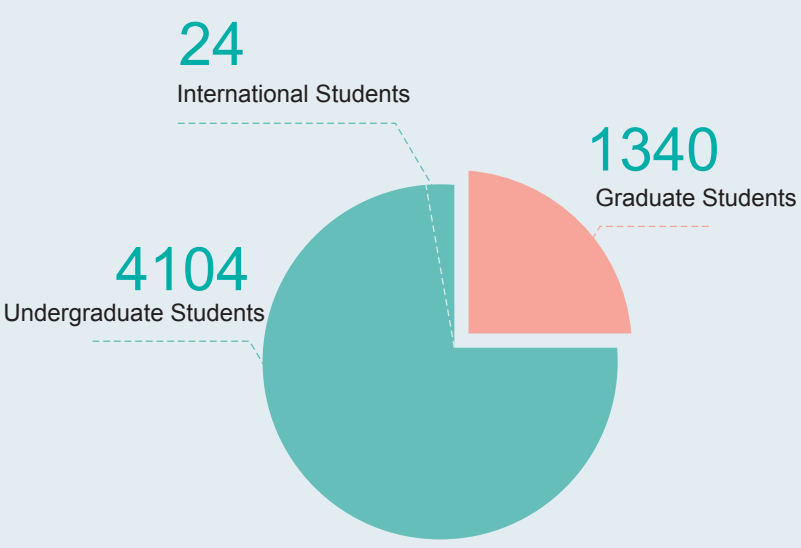
- Mathematics
- Physics
- Chemistry
- Biology
- Mechanics
- Electronic science and technology

Professional master's programs

- Master of Engineering


School of Business
Finance
Financial Engineering
Department of Finance
School of Medicine
Shenzhne People's Hospital
The Third People's Hospital of shenzhen
.....
Teaching Hospitals and Affiliated Hospitals
Biomedical Science
Clinical Medicine
Specialized Subject
School of Innovation and Entrepreneurship
School of Humanities and Social Sciences
Humanities Center
Centre for Social Science
Higher Education Research Center
Culture Center
Language Center
Art Center
Sports Center
College of Science
Department of Mathematics
Financial Mathematics
Pure and Applied Mathematics
Statistics
Department of Physics
Physics
Applied Physics
Department of Chemistry
Chemistry
Department of Earth and Space Sciences
Geophysics
Department of Statistics and Data Science
College of Engineering
Department of Biomedical Engineering
Biomedical Engineering
Department of Materials Science and Engineering
Materials Science and Engineering
Department of Electronic and Electrical Engineering
Communication Engineering
Microelectronics Science and Engineering
Opto-electronic Information Science and Engineering
Information Engineering
School of Environmental Science and Engineering
Environmental Science and Engineering
Hydrological and Water Resources Engineering
Department of Computer Science and Engineering
Computer Science and Technology
Department of Mechanics and Aerospace Engineering
Theoretical and Applied Mechanics
Aerospace Engineering
Department of Mechanical and Energy Engineering
Mechanical Engineering
Department of Ocean Science and Engineering
Marine Science
School of System Design and Intelligent Manuracturing
School of Microelectronics
School of Life and Health Sciences
Department of Biology
Biological Sciences
Biotechnology
Bioinformatics
23/05/2019

EDUCATION



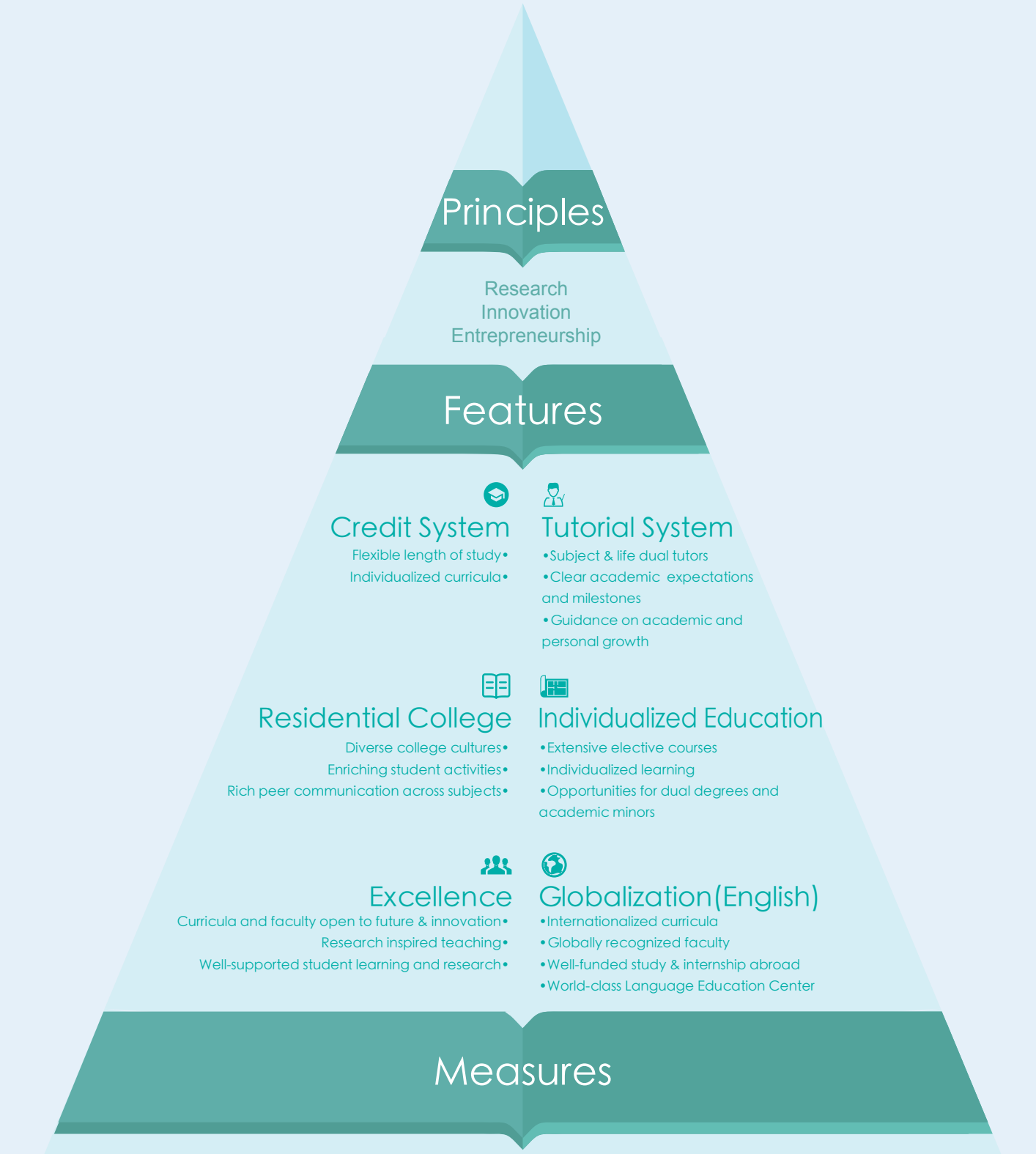
10:1
Student-faculty ratios

100
Quantity of humanities, social science and art courses (not including online courses)

81
Number of undergraduate internship bases

50%+
Over 50% continue to study in world well-known universities

UNDERGRADUATE EDUCATION



FACULTY

FACULTY STRUCTURE

Teaching and Research series: 355

Teaching series: 79

600+

Research series: 325

100%

100% hold PhD degrees

90%

90% have worked overseas

60%

60% are from the top 100 universities in the world

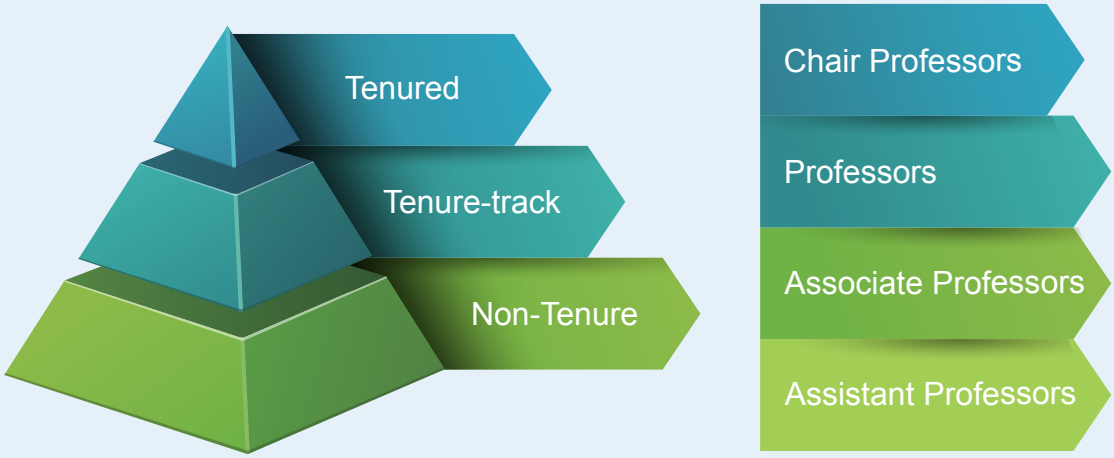
28
Academicians and Fellows of Academies

35
International Fellows

24
National Science Fund for Distinguished Young Scholars recipients

111
Shenzhen High-level Talents recipients

TALENT POLICY



TALENT AWARDS

President Shiyi Chen
Awarded “Outstanding Scientist Award of QiuShi Fund”.

Professor Tao Tang
Vice-President of SUSTech, has been appointed as the 2017 new member of the Chinese Academy of Sciences.

Prof. Bin Tan
Awarded "NSFC’s Research Fund for National Young Scientists".

Prof. Qing Hu
Awarded “Second Prize of State Preeminent Science and Technology Award of China”.

RESEARCH

In 2018, it was 76.74 (June 2017 to May 2018), moving the university's rank up to 26th

26th — 2018

In 2017, it was 33.26 (May 2016 to April 2017), moving the university's rank up to 31st.

31st — 2017

In 2016, it was 19.33 (May 2015 to April 2016), moving the university's rank up to 44th.

44th — 2016

In 2015, the fractional count of SUSTech in the Natural Science Index was 13.88 (November 2014 to October 2015), ranked 55th in mainland China.

55th — 2015

5406
Papers

612
Authorized Patents

1319
Approved Project

¥2.1 billion
Approved funding

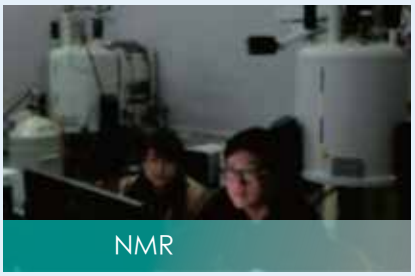
¥1.9billion
The value of research facilities

RESEARCH FACILITIES


2000 m² clean room facility


HR-TEM


Cryo-electron microscope


NMR

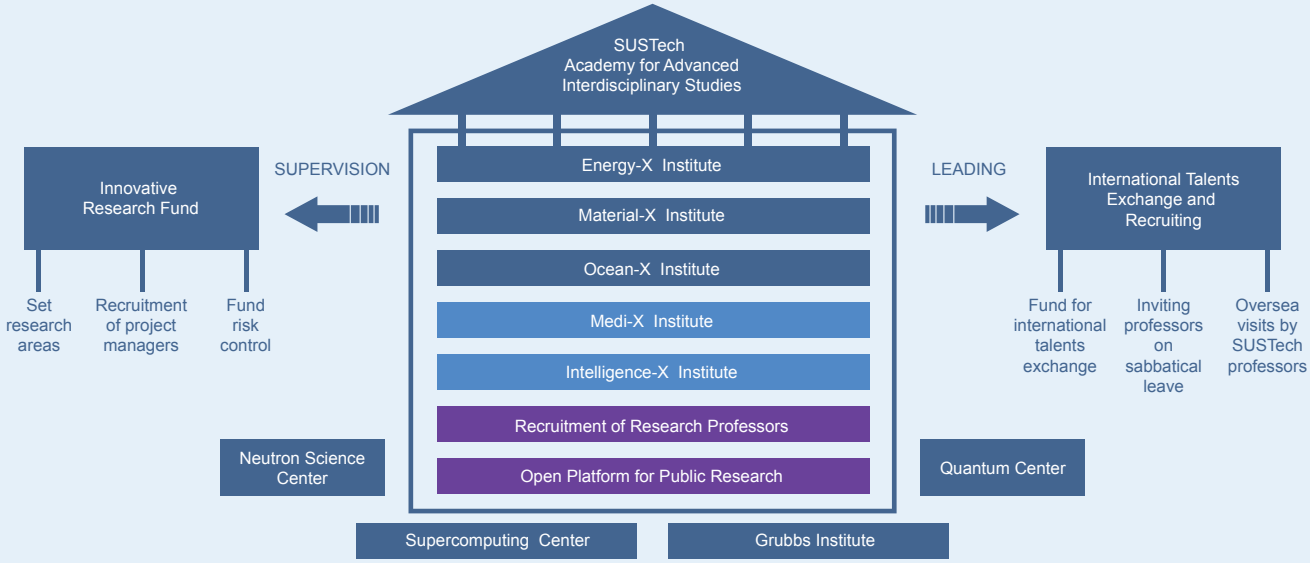

MBE/ARPES/STM


Supercomputer center

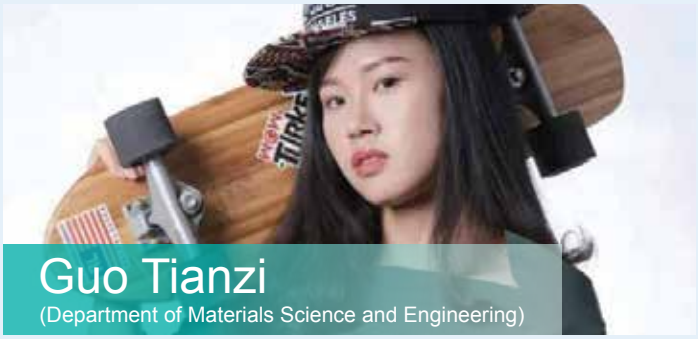
Electron microscopy, super-computing, cryo-electron microscopy are the best in China

- **Scientific research platforms:** Since its establishment, Southern University of Science and Technology (SUSTech) has had 38 scientific research laboratories approved, including 9 provincial and ministerial laboratories, and 27 municipal laboratories.
- **Scientific research institutions:** The Shenzhen Institute for Quantum Science and Engineering, the Aerospace Power Research Institute, the Future Network Research Institute, the Shenzhen Grubbs Institute and the International Center for Mathematics.
- **SUSTech Public Research Service Platform:** the Materials Characterization and Preparation Center (Core Labs), the Laboratory Animal Center, and the Center for Computational Science and Engineering

SUSTECH ACADEMY FOR ADVANCED INTERDISCIPLINARY STUDIES



STUDENTS



Guo Tianzi

(Department of Materials Science and Engineering)

She graduated from the Department of Materials Science and Engineering (MSE) and lived at Shude College until her graduation in 2018.

Guo Tianzi was ranked second in MSE's Grade Point Average (GPA) and has subsequently received several offers for further study abroad.

During her undergraduate studies, Guo Tianzi led the SUSTech composite's team to conduct scientific research into carbon fiber resin-based composites, for which they obtained 3 million yuan of funding. Following that, she specialized in the research, development and product development of nano-coating liquid. Compared to similar products in the market, the team's first-generation product boasts significant abrasion and scratch resistance advantages. Guo gave up the opportunity to further study. Instead, she opted to start a business, and established Shenzhen Nanke Fluorescent Nano Technology Co., Ltd.

"The attempt process itself is the biggest gain."

OUR ALUMNI

Jiale Wang
(Graduated in 2015)

Position after Graduation: PhD program in Material Science and Engineering, University of Oxford

Thanks SUSTech: “SUSTech’s heuristic and interactive teaching methods have greatly stirred up my interest in learning and my research enthusiasm. In the advisor group,learning and my research enthusiasm. In the advisor group,I learned lots of specific research skills, and more importantly, developed my own research capabilities of critical thinking and independent thinking. For me, further studies at Oxford is a continuation of my four-year life at SUSTech.”

Xiaodan Zhu
(Graduated in 2016)

Position after Graduation: Technology management in National Instruments (NI)

Thanks SUSTech: “From opportunities to enter various competitions, labs open to undergraduates and to the chance for undergraduates to work on projects together with their Apartment Advisors, SUSTech offers so many opportunities to the students.

Shuhan Bao
(Graduated in 2017)

Position after Graduation: Master program at Columbia University

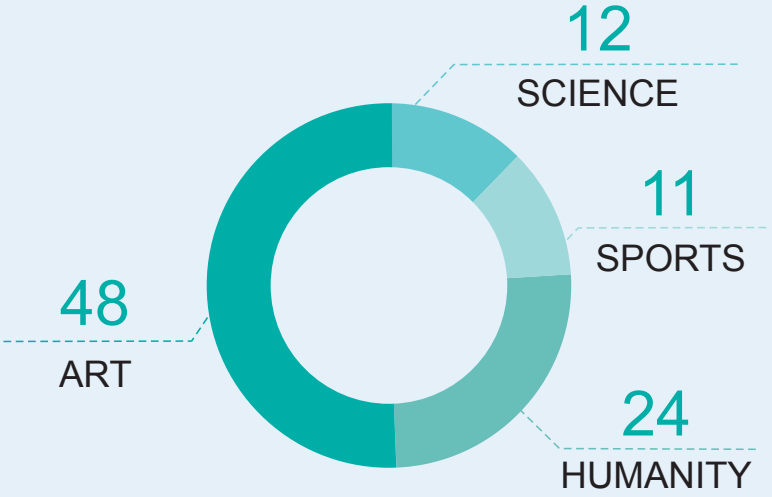
Thanks SUSTech: “I'm honored to be a part of SUSTech. The better SUSTech is, the better we can get. We should make ourselves stronger to be on a fast track together with SUSTech!”

CAMPUS LIFE

STUDENT CLUB ACTIVITIES

Students at SUSTech organized many clubs such as the Literature Club, Hip Hop Club, Reading Club, Sit-Com Society, Guitar Club, Calligraphy Society and Voice-Dubbing Society. Through extra-curricular activities, students from different programs and disciplines interact with each other and share living and learning experiences.

Currently, there are 95 clubs and societies.



ACADEMIC CULTURE

SUSTech students communicate face to face with Nobel laureates,experts and scholars, and attend seminars, lectures and forums,which are frequently organized on campus.

SUSTech strongly advocates the interaction between theory and practice and support undergraduates' participation in research.

720
Lectures (2.3 per day)

80+
High-level forums and academic conferences (one per week)

50+
Academicians/Fellows (seven per month) shared their research findings

10+
Nobel laureates (one per quarter) visited SUSTech

As a pioneer and innovator in China's higher education, SUSTech encourages students to develop independence and sense of responsibility through various social service activities.

SUSTech is an exciting and vibrant place with its athletic culture and numerous sports facilities.

GLOBAL ENGAGEMENT

GLOBAL PARTNERSHIPS (IN ALPHABETICAL ORDER)

North America

- Columbia University
- Georgia Institute of Technology
- Illinois Institute of Technology
- Johns Hopkins University
- Massachusetts Institute of Technology
- McMaster University
- Rice University
- Stony Brook University
- Temple University
- University of Alberta
- University of British Columbia
- University of California, Berkeley
- University of California, Irvine
- University of California, Los Angeles
- University of California, Riverside
- University of Michigan
- University of Notre Dame du Lac
- University of Pennsylvania
- University of Waterloo
- University of Wisconsin-Madison

Africa

- Ain Shams University, Egypt
- Addis Ababa University, Ethiopia
- Makerere University
- University of Djibouti
- University of Nairobi (Kenya)

United Kingdom

- King's College London
- University of Birmingham
- University of East Anglia
- University of Edinburgh
- University of Leeds
- University of Oxford
- University of Warwick
- University of Surrey

Europe

- ETH Zurich
- HEC Paris
- Friedrich-Alexander-Universität Erlangen-Nürnberg
- Jagiellonian University
- University of Copenhagen

Asia Pacific

- COMSATS Institute of Information Technology
- Kanazawa University in Japan
- Korea Advanced Institute of Science and Technology
- Hong Kong University of Science and Technology
- Monash University
- National University of Singapore
- Osaka Prefecture University
- Royal University of Phnom Penh, Cambodia
- Seoul National University
- The Hebrew University of Jerusalem
- The University of Hong Kong
- University of Colombo, Sri Lanka
- University of Engineering and Technology, Lahore, Pakistan
- University of Hong Kong
- University of Sydney
- University of Technology, Sydney
- University of Tokyo
- University of Queensland
- Zaman University, Cambodia

Since January 2015—
90+ agreements
40+ undergraduate exchange programs

INTERNATIONAL ADVISORY COUNCIL MEMBERS

Henry T. Yang (Chair)

Chancellor, University of California, Santa Barbara

Xinhe Bao

President, University of Science and Technology of China

Tony F. Chan

President，King Abdullah University of Science and Technology

Edward BYRNE

President &Principal King's College London

Peter Høj

President, University of Queensland

David W. Leebron

President, Rice University

Jianhua Lin

Former President，Peking University

David Richardson

Vice-Chancellor, University of East Anglia

Louise Richardson

Vice-Chancellor, University of Oxford

Mark S. Schlissel

President, University of Michigan

Choon Fong Shih

University Professor, National University of Singapore

Sung-Chul Shin

President, Korea Advanced Institute of Science and Technology

Samuel L. Stanley Jr.

President, Stony Brook University

Wei SHYY

President，Hong Kong University of Science and Technology

TAN Eng Chye

President，National University of Singapore

JOINT GRADUATE PROGRAMS WITH OVERSEAS UNIVERSITIES(Incomplete list)

SUSTAINABILITY

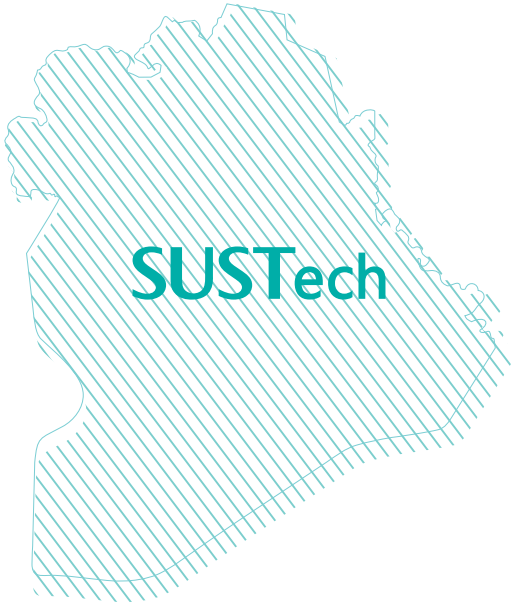
PHASE I

Building area: 260,000 m² (FIRST PHASE)+162,000 m²

PHASE II

Building area: 500,000 m²

The new campus enjoys convenient transportation in a natural, tranquil environment. The buildings are practical in use and modern in style. The architecture accommodates requirements of teaching, research and management, and conveys notions of energy conservation and eco-friendliness.



Scan the code and you can have a view of the future of SUSTech.

SUSTech Hall and School of Humanities and Social Sciences

College of Science

College of Engineering

Community Center

School of Medicine

Business School

GOVERNANCE

EXPLORING A MODERN UNIVERSITY SYSTEM WITH CHINESE CHARACTERISTICS

Endorsed by the Shenzhen Municipal Government, SUSTech has established a modern governance system to ensure institutional autonomy. Governed by a collective Board of Regents, the University is led by the President under the auspices of the University Council, with full participation in the governance of academic affairs.

SUSTech has a council, a party committee, a President, a University Council, and a University Academic Committee. It has subsequently established a professor's committee and an advisory committee. The council is the school's decision-making body, and the Board of Regents consists of government officials, University representatives and leaders from education and business sectors. As an advisory body, the Council employs world-class scholars as members.

SUSTech has set up an education foundation to receive social donations for education and research. In 2018, the SUSTech Education Foundation (SUSTCEF) has raised more than 1,800 donations and added new amounts. Donations have increased 111.44% year-on-year.

INNOVATION IN:

Education philosophy

- Building a world-class university, rooted in China
- Our spiritual pillars are Research, Innovation and Entrepreneurship.
- New and entrepreneurial features, strengthening "Excellence, International, Innovative".
- Supporting major strategic needs for China and the Pearl River Delta

Governance System

- Follow the principles of council governance,
- Tenure, and academic autonomy,
- Presidential responsibility system under the leadership of the University Council

Training mode

- Adopting "631" college entrance examination comprehensive evaluation admission mode
- "Credit system, tutor system, residential college system" and "internationalization, personalization, excellence" are the core of SUSTech' s talent training scheme
- Collaborative education system, vigorously cultivate top-notch innovative talents

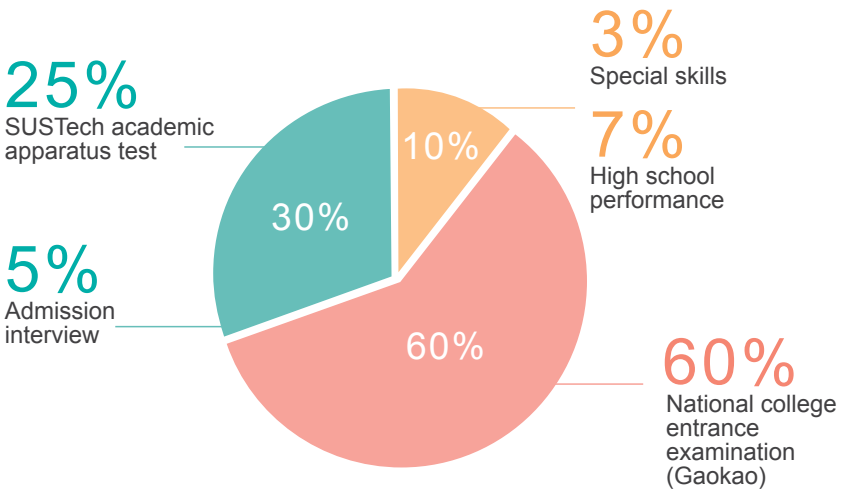
Personnel management

- The characteristics of talent cultivation centered on elitism
- Cooperative education system vigorously cultivating top innovative talents
- Implementing an employment system for all staff that encourages long-term employment and flexible promotions to ensure viability of the talent team

Research System

- Encourage interdisciplinary integration between scholars
- Implementation of PI system
- Encouraging entrepreneurship for faculty members by providing policy and service support to guarantee income allocation.

COMPREHENSIVE EVALUATION ADMISSION MODE



The "6-3-1 Evaluation" has eliminated disadvantages like "one-sided examination-oriented education" in traditional systems of examination and admission. The "6-3-1 Evaluation" was first implemented by SUSTech in 2012, leading the reform process for the national college examination system. SUSTech will not admit students who have high grades with Gaokao but low scores in the SUSTech academic apparatus test. However, SUSTech will admit students who show great innovation abilities in the evaluation process, even if they don't have the highest score at the national college entrance examination.

SHENZHEN

Shenzhen was designated in 1980 as the first Special Economic Zone (SEZ) to implement China's opening-up policy and modernization strategy. As an important high-tech and manufacturing hub in South China, Shenzhen is one of the most economically invigorating cities in China and among the fastest growing cities in the world. Shenzhen is a pioneer city where dreams come true.

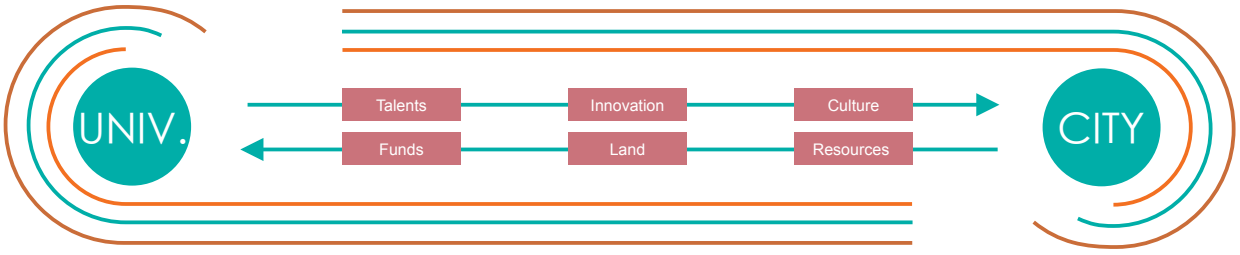
A LEADING INNOVATION CITY

30,000+
Technology companies

17
Companies with over
RMB 10 billion ($1.45 b) of sales

157
Companies with over
RMB 1 billion ($144.9 m) of sales

1,203
Companies with over
RMB 0.1 billion ($14.5 m) of sales



- No.1 Chinese city in comprehensive economic competitiveness (Chinese Academy of Social Sciences, 2017)
- In 2018, Shenzhen's total social research and development investment exceeded 100 billion yuan.
- In 2018, the number of PCT international patent applications in Shenzhen was 18,000, representing 71.5% of the total applications in Guangdong Province, ranking first in China's large and medium-sized cities for 15 consecutive years.
- Frontier areas of innovation include biology, Internet development, new energy, new materials, cultural and creative industries and next-generation information technology.

AN EMERGING GLOBAL CITY

No.18
World's metropolitan economy

12.2 million
International visitors

$7.4 billion
FDI

No.2
World's largest container port

82
International Friendship Cities

26,579
Foreign residents

$377 billion
Imports and exports

"Shenzhen is the city that most resembles the Silicon Valley."

——Business Week (2014)

UNEP
International Garden City
2000

UNEP
Global 500 Roll of Honor for Environmental Achievement
2002

UNESCO
City of Design
2008

UNESCO
Global Model City for the Promotion of Nationwide Reading
2013

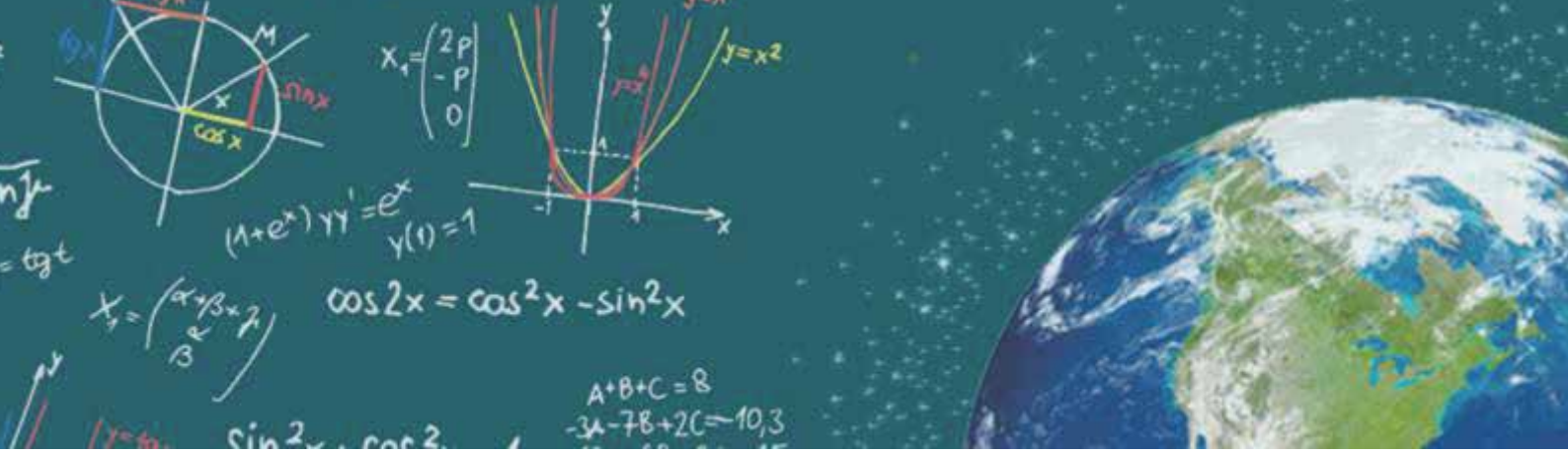
- Home to China's leading corporations in the Fortune 500, e.g. Huawei, Tencent and Ping An Insurance
- Nurturing emerging giant enterprises of global impact, e.g. BYD Auto, BGI Genomics, DJI-Innovation

HUAWEI 华大基因 BGI dji Tencent 腾讯 mindray 迈瑞 BYD

SCHOOLS &DEPARTMENTS

SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY

SUSTech Southern University of Science and Technology



Department of Mathematics

Undergraduate major(s):

Mathematics and Applied Mathematics
Statistics
Financial Mathematics

Graduate program(s):

Mathematics

Faculty:

1 Academician of the Chinese Academy of Sciences
1 Recipient of the Outstanding Youth Fund
1 Vice President of the of the Organization for Women in Science in the Developing World (UNESCO)

The Department of Mathematics at SUSTech was founded in June 2015. As of the 2018-19 academic year, the Department consists of 39 faculty members, 72 graduate students and 249 students undertaking an undergraduate program.

The Department offers undergraduate degrees in the following areas:

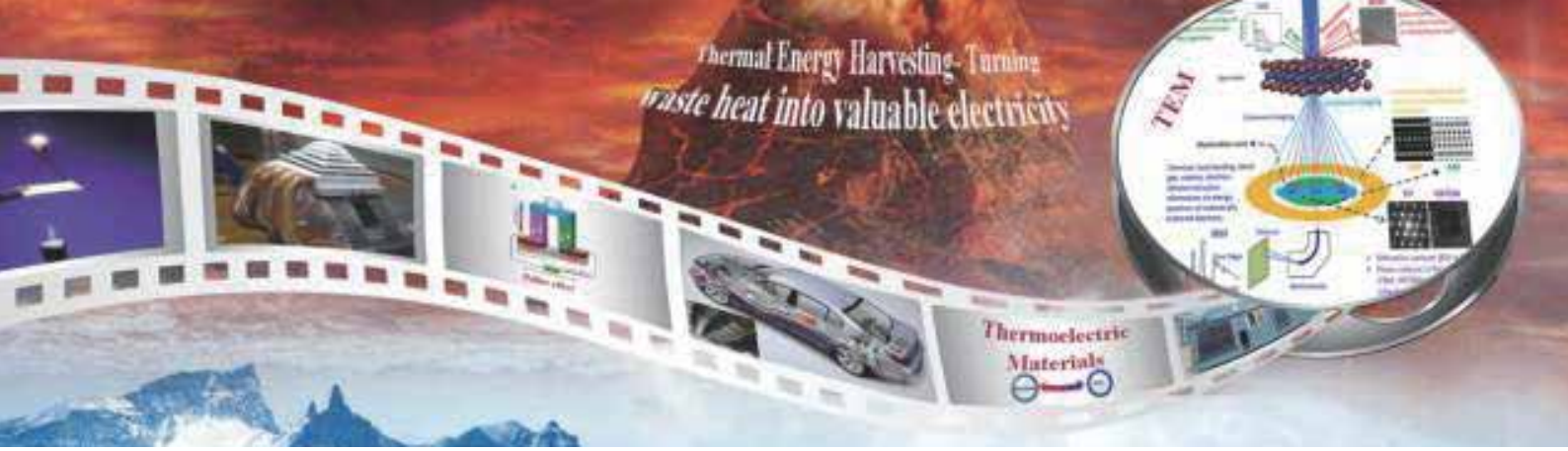
Mathematics and Applied Mathematics
Statistics
Financial Mathematics

Our graduate programs (master and doctoral) cover nearly all fields of mathematical sciences. In addition, the Department also offers joint Ph.D. programs with well-known overseas and Hong Kong/Macao universities, providing excellent opportunities for prospective students. Our faculty members' research covers a broad range of areas including Mathematics, Computational and Applied Mathematics, Probability and Statistics, and Financial Mathematics.

The Department is well-funded for its research. In the last three years, our faculty members have successfully obtained 35 new external research grants (25 at the national level), totaling over 15 million RMB. The success rate of our faculty's grant application to China's National Natural Science Foundation is among the highest in the nation.

The Department enjoys an outstanding faculty. Most of our senior faculty members have had tenured positions in leading universities in the United States, Canada, Australia and European countries. Many of our junior faculty members have spent many years of teaching and research experience overseas, after receiving their degrees in some of the top universities from around the world. Our faculty members have spoke at major international conferences, received distinguished honors, served on editorial boards of international research journals and been published in numerous prestigious journals.

As the Department continues to grow, we are actively recruiting new faculty members, postdoctoral researchers, visiting scholars and graduate students. We welcome outstanding candidates to join us in our exciting journey to become a first rate mathematical department in the world.



Department of Physics

Undergraduate major(s):

Physics

Applied Physics

Graduate program(s):

Physics

Faculty:

2 Academicians of the Chinese Academy of Sciences

3 Recipients of the Outstanding Youth Fund

1 Excellent Young Scholar of Guangdong

The Department of Physics was established in 2011. We are devoted to providing a first-class education and top-notch research in physics. Not only do we offer complete undergraduate programs in physics and applied physics, but we also offer master and doctoral programs. We collaborate with universities or renown such as Peking University, the University of Hong Kong, the Hong Kong University of Science and Technology, and the National University of Singapore. The Department has also established long-term joint post-doctoral workstations with top universities and colleges such as Peking University, Fudan University and Wuhan University.

The Department of Physics now has four specific research foci, while working on establishing three more. Faculty members are conducting cutting-edge research in areas such as quantum transport and control, surface physics, computational physics, condensed matter theory, quantum information and quantum computation.

In recent years, faculty members have published many papers in high profile academic journals, increasing awareness of the Department of Physics.

To meet the new challenges and opportunities of the field, the Department of Physics has been paving the way in subject development, faculty recruitment, student education, academic exchanges and international cooperation. The Department is also keen to help its undergraduate students participate in research activities and programs.

Department of Chemistry

Undergraduate major(s):
Chemistry

Graduate program(s):
Chemistry

Faculty:
2 Academician of the Chinese Academy of Sciences
1 Foreign Fellow of the National Academy of Sciences
5 Recipient of the Outstanding Youth Fund

Chemistry is regarded as the center piece of the sciences, due to its interdisciplinary nature. Established in 2011, the Department of Chemistry has developed at a rapid pace, and now has 36 fulltime faculty members and 10 engineers. The Department aims to be one of the best in China, and has attracted experts from all over the world, some of whom were already tenured professors in the United States or Japan before joining SUSTech.

In particular, the Department of Chemistry strives to make internationally reputed achievements in research and foster excellent scientists and engineers. It aims to focus on inorganic chemistry, organic chemistry, bioanalytical chemistry and physical chemistry/molecular materials chemistry.

Adhering to SUSTech's motto of "Research, Innovation and Entrepreneurship," the Department of Chemistry focuses on cultivating students' innovative spirit, critical thinking and ability for interdisciplinary cooperation.

SUSTech undergraduates are strongly encouraged to participate in cutting-edge research supervised by professors. The Department maintains a wide range of state-of-the-art lab instruments necessary for modern chemical research and education.

Department of Biology

Undergraduate Major(s):

Biological Sciences

Biotechnology

Bioinformatics

Graduate program(s):

Biology

Faculty:

2 Academicians of American Academy of Sciences

1 Recipient of the Outstanding Youth Fund

2 CAS Hundred-Talent Program

1 The State Council Special Allowance Expert

4 Guangdong High-level Personnel of Special Support Program

International Joint Project:

KCL“3+1”Program（Dual Degree）

The University of Edinburgh “2+2” Program（Dual Degree）

JHU Summer Research Program

UTHealth “3+2”Program （Dual Degree）

UQ”3+2” Dual Degree Program（Dual Degree）(In Prepartion)

Welcome to the Department of Biology! Since its establishment in 2012, the Department has attracted international renowned professors to lead dozens of young scientists at the start of their independent academic careers, all in the pursuit of educational and scientific excellence. Our faculty members are researching a diverse range of topics, including cell biology, development & regeneration biology, neurobiology, plant biology & food safety, bioinformatics, systems biology, structural biology and biophysics. The primary goals of our faculty are to address the most significant fundamental biological questions and to develop new strategies to treat various complex diseases. Such efforts benefit from a collaborative and interdisciplinary spirit that is deeply rooted in the minds of every SUSTech faculty member.

Mentoring the next generation of biologists is a key task for the Department of Biology. Our professors select internationally renowned textbooks with which to teach core undergraduate courses. Undergraduate students are also encouraged into the laboratory as soon as possible, in order to give them firsthand experience in basic or applied biological research. Such experience helps them consolidate their mastery of basic techniques, further broadening their knowledge base and ensuring that they can identify the problems of the future and solve them.

The life sciences, one of the fastest growing scientific disciplines, is said to be the driving force behind the growing global economy and provides the knowledge for the development of new technologies seeking to improve society as a whole. With generous support from the Shenzhen municipal government, the Department of Biology at SUSTech will surely grow into a top tier globally recognized research and education center!

Department of Earth and Space Sciences

Undergraduate major(s):

Geophysics

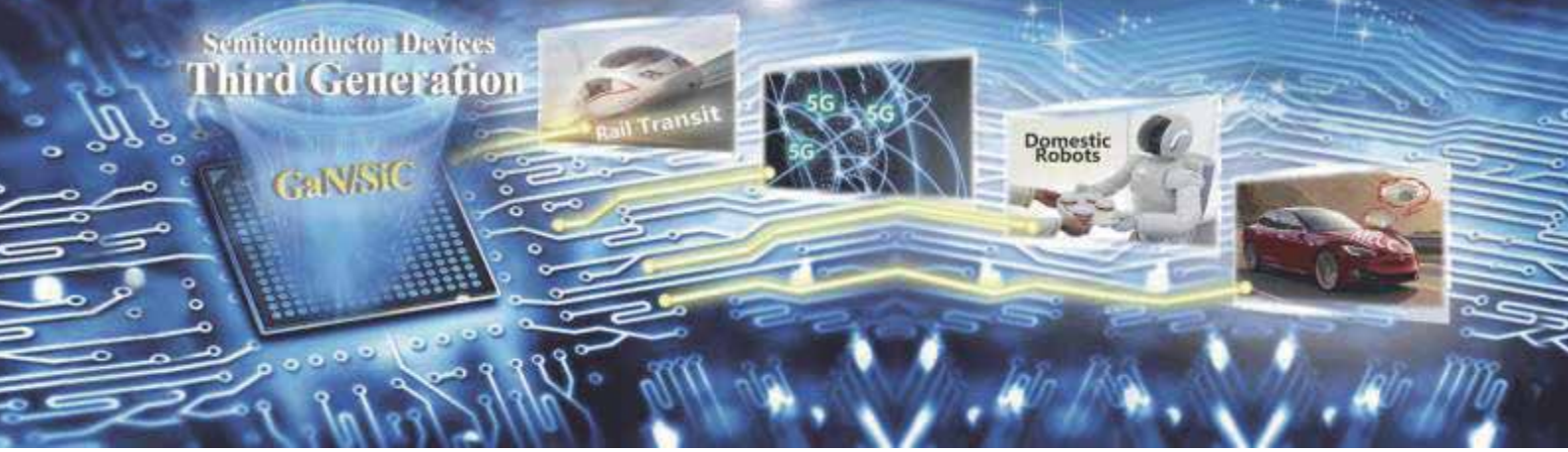
Faculty:

1 Academician of the Chinese Academy of Sciences

2 National Science Fund for Distinguished Young Scholars

The Department of Earth and Space Sciences (ESS) was established on December 2016. ESS focuses on the physics of the Earth, geo-space and plants in outer space. Through building up a world-leading program of research and education in earth and space sciences, we strive to conduct research to advance our understanding on the complex natural system of earth and space. This understanding seeks to provide scientific solutions to many societal challenges of our time, including natural disasters, natural energy resources and space exploration.

In the meantime, ESS offers rigorous hands-on training for students and prepares them to be future leaders in academia, government and industry. ESS encompasses a wide range of scientific disciplines, including geophysics, space physics, space geodesy and planetary sciences. With 24 faculty members, ESS welcomes more talented scientists to join us and work together to build a world-class research and education center for Earth and Space Sciences.



Department of Electrical and Electronic Engineering

Undergraduate major(s):

Microelectronic Science and Engineering
Optoelectronic Information Science and Engineering
Telecommunication Engineering
Information Engineering

Graduate program(s):

Electronic Science and Engineering

Faculty:

3 Academician, CAS
2 The National Science Fund for Distinguished Young Scholars
6 Winners of Guangdong Natural Science Funds for Distinguished Young Scholars
5 Top talents of Technical Innovation of Guangdong Special Support Program
2 Guangdong Prominent Teacher
3 Distinguished Professors of Shenzhen Scholars Program
3 Fellows of important international associations
1 First prize for State Technological Invention Award by Ministry of Education

Founded in 2013, the Department of Electrical and Electronic Engineering (EEE) was one of the first departments established. The Department is committed to providing high-quality education to students and striving to excellence in research.

Electrical and electronic technologies are core to today's social and economic development, particularly in the context of China's industrial restructuring and optimization. EEE provides a wide scope for technological research. Particular areas of emphasis include broadband communication network, Internet of Things (IoT), new energy, bio-medical electronics and microelectronics. EEE focuses on professional training in these fields to open up innumerable employment opportunities across the globe in industry, government and academia.

EEE is host to several key research facilities, including Shenzhen Key Laboratories and Laboratories of the Development and Reform Commission of the Shenzhen Municipal Government. EEE is dedicated to assisting the economic and social development of China through a high-quality education and excellence in research. It also provides students with superior critical thinking and problem solving skills within a global perspective. With the ultimate aim of becoming a world leader in engineering research, EEE will continuously strive for excellence, progress and innovation in the future.

Department of Materials Science and Engineering

Undergraduate major(s):

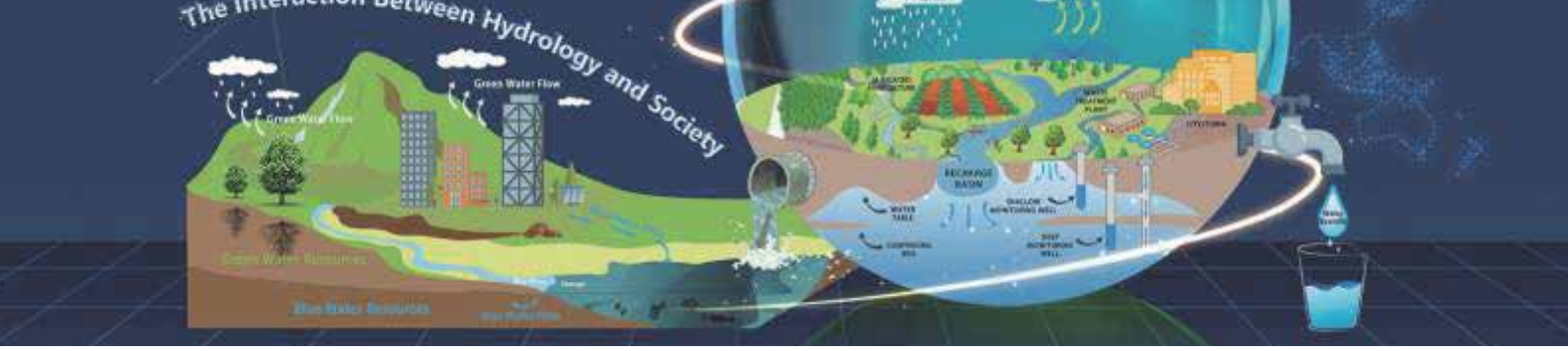
Materials Science and Engineering

Faculty:

1 Fellow of Canadian Academy of Engineering
1 National Science Fund for Distinguished Young Scholars
6 chair professors
5 professors
11 associate professors
2 assistant professors

The Department of Materials Science and Engineering (MSE) engages in a broad scope of advanced materials research, including electronic information materials, energy and environmental materials, biological and medical materials, functional materials, as well as materials processing and manufacturing. The MSE program has developed to meet the strategic needs of the Pearl River Delta, city of Shenzhen and China. MSE aims to become a leader in both knowledge discovery and technology transfer.

In 2018, Essential Science Indicators (ESI) listed MSE at SUSTech as being in the top 1% in the world.



School of Environmental Science and Engineering

Undergraduate major(s):

Environmental Science and Engineering
Hydrology and Water Resources Engineering

Faculty:

1 Fellow of Royal Academy of Engineering, UK
3 Recipients of the Outstanding Young Investigator Award from the National Natural Science Foundation of China (NSFC)
3 Recipients of the Outstanding Young Investigator (junior level) Award from NSFC
2 Recipients of the State Council Special Allowance

Spurred on by China's strategic needs for better environmental protection and sustainable development, Southern University of Science and Technology (SUSTech) established the School of Environmental Science and Engineering (SESE) in May 2015. Its mission is to become an innovative training ground for cultivating top talent in environmental fields, an international center for excellence for environmental research, a leading platform for innovation and industrialization of advanced environmental protection technologies, and an influential think-tank for environmental sustainability.

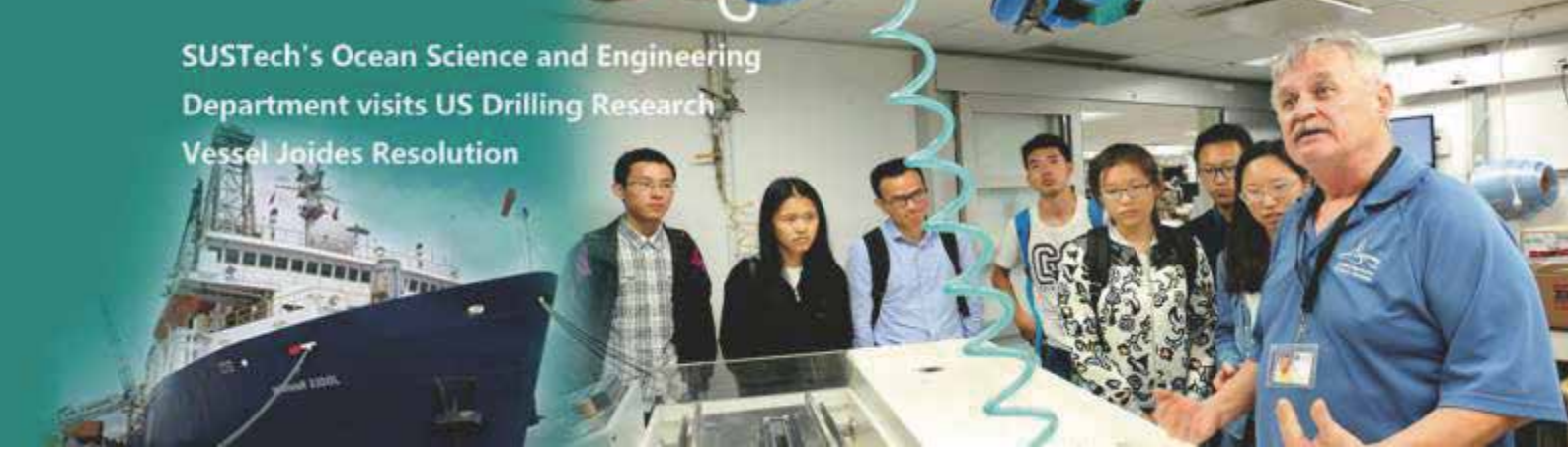
SESE is broadly split into three groups or programs:
Environmental Science/Engineering/Health;
Hydrology and Water Resources Engineering;
Global Environmental Change and Management.

Major areas of research include watershed hydrology and biogeochemistry, soil and groundwater contamination and remediation, environmental health risk assessment and interventions, environmental microbiology and biotechnology, atmospheric chemistry and air pollution control, solid waste recycling and management, remote sensing of the environment, macroecology and biodiversity, global change and environmental sustainability.

SESE is also developing advanced technologies to meet urgent societal needs, such as unique technologies for dealing with wastewater treatment, applications for big data, energy consumption reduction and emission reductions, as well as monitoring and sensing the environment. SESE is home to the State Environmental Protection Key Laboratory of Integrated Surface Water-Ground Water Pollution Control as well as the Shenzhen Institute of Sustainable Development.

Undergraduate education at SESE is characterized by an emphasis on solid academic preparation and innovation in science and engineering. Each major has their own unique features, with Environmental Science and Engineering examining the nexus of resources, environment and socio-economic development, while Hydrology and Water Resources looks at water from the macro to the micro-level.

SESE currently has 55 full-time faculty members and research staff. Many of them serve on the editorial boards of leading international journals and significant international committees. There are tenure-track and tenured positions to be filled over the next 3-4 years, in order to enhance and expand on an already excellent faculty. SESE welcomes talented faculty and students from around the world to join us in building a world-class interdisciplinary environmental research center of excellence, and contribute to the solution of global environmental problems.



Department of Ocean Science and Engineering

Undergraduate major(s):
Oceanography

Faculty:
1 Academician of Chinese Academy of Science
2 National Science Foundation for Distinguished Young Scholars
1 Hundred-Talent Program (Chinese Academy of Sciences)
2 Shenzhen high level outstanding talents

Since its establishment on July 2015, the Department of Ocean Science and Engineering (OSE) has gathered the strengths of scientific research across the globe in its commitment to achieving breakthrough scientific results in major international marine science or engineering issues. OSE aims to become an internationally renowned marine science and engineering research base that cultivate high-level talents.

The top priority for OSE has been to build up a world-class faculty. In doing so, its team is researching a range of topics such as the marine plate and internal structure of the Earth, the interaction between the ocean lithosphere and marginal sea, marine sediments and oil/gas/mineral resources, marine geological microbes, marine microbial resources, biogeochemistry, ocean circulation and climate, sea-air interaction, marine engineering technology, and marine engineering structure.

OSE has undertaken 27 national and local scientific research projects, with more than 30 million RMB in funding, while publishing more than 80 high-quality articles in top academic journals. OSE has been approved for three key laboratories:

The Shenzhen Key Laboratory of Ocean Bottom Seismography Equipment and Technology Engineering;

The Shenzhen Key Laboratory of Marine Oil & Gas Drilling Equipment and Pipeline Engineering;

The Shenzhen Key Laboratory of Marine Archaea Geo-Omics.

OSE has established one undergraduate major of Oceanography, to train students with specific knowledge and special skills. On graduation, students will be high-quality scientific and technological talents with a global outlook and have the ability to engage in scientific research, education, management and technological R&D in marine science and engineering.

Building on the platform provided by the Institute of Ocean Engineering of Shenzhen, OSE will soon become an oceanographic institution equipped with a research vessel, a dock and an interdisciplinary marine engineering laboratory. This will give OSE a similar position as top oceanographic institutions around the world.

Department of Mechanics and Aerospace Engineering

Undergraduate major(s):

Theoretical and Applied Mechanics

Aerospace Engineering

Graduate program(s):

Mechanics

Faculty:

2 Academicians of the Chinese Academy of Sciences

1 Academician of the Chinese Academy of Engineering

1 Fellow with dual-fellowship in Royal Society of Canada and Canadian Academy of Engineering

Founded in December 2015, the Department of Mechanics and Aerospace Engineering (MAE) aims to establish a world-leading department in mechanics and aerospace engineering. It covers various research areas such as fluid mechanics, aerodynamics, thermodynamics, aeroacoustics, mechanics, combustion, materials and system control. MAE learns from the best practices of its peer departments around the world in order to develop into an international research institution that meet the national strategic needs in mechanics and aerospace while cultivating young innovative talents. It also seeks to conduct cutting-edge fundamental research and applied research that will provide maximum benefit to society.

MAE has a goal of becoming a top-tier international leader through the introduction of an innovative education system emphasizing industry-university-research, in close cooperation with the Chinese aerospace industry. The objectives include nurturing innovative talents, researching and developing key technologies, and providing technical services for the national aerospace industry.

Department of Mechanical and Energy Engineering

Undergraduate major(s):

Mechanical Engineering

Faculty:

1 Academician of the Chinese Academy of Engineering

1 Academician of the Canadian Academy of Engineering

The Department of Mechanical and Energy Engineering (MEE) at SUSTech was founded on January 2016, and aims to establish a world-class education and research base. MEE focuses on educating innovative talents who have comprehensive theoretical knowledge to combine with an interdisciplinary background and can conduct high-end engineering research to solve significant challenges of our times. MEE educates leading talents who possess strong and broad fundamental knowledge, outstanding practical skills and a streak of independence. These students are often gifted with broad applied knowledge, excellent innovativeness and a global perspective.

MEE has been recruiting faculty members and researchers from across mainland China and around the world since its establishment. The team currently has 26 tenure or tenure-tracked professors with more than 60 teaching professors, research professors and laboratory engineers.

MEE is developing in areas such as intelligent manufacturing, forming and additive manufacturing, precision machining, robotics and automation, and energy engineering.

Department of Computer Science and Engineering

Undergraduate major(s):

Computer Science and Technology

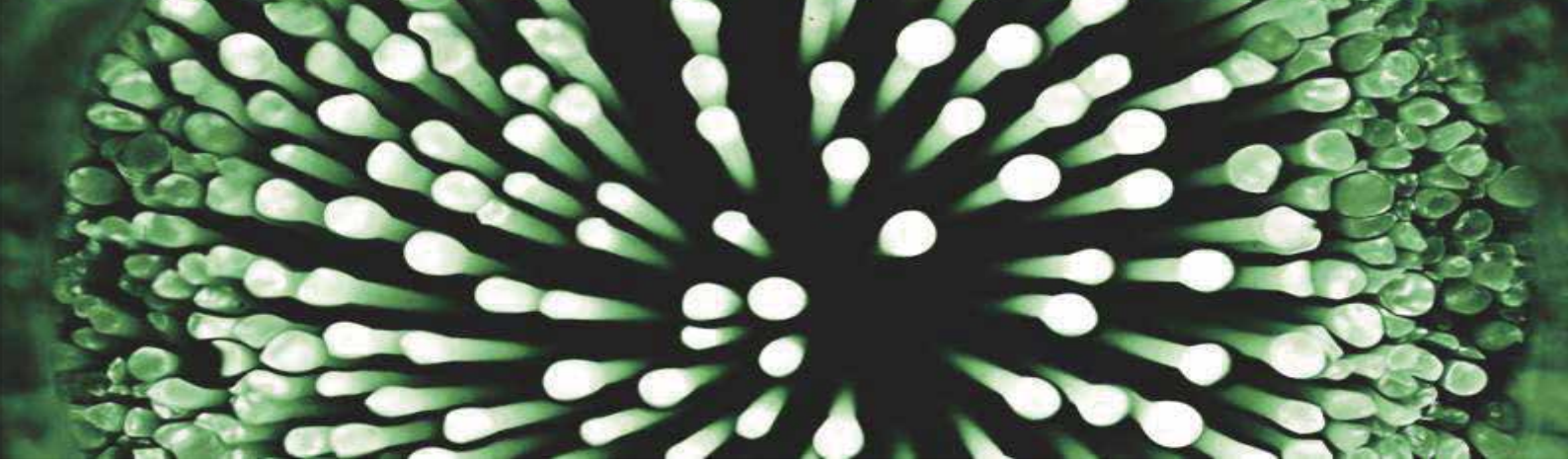
Faculty:

1 Turing Awardee
3 National Distinguished Scholars recipients
3 IEEE Fellows
1 IET fellow

The Department of Computer Science and Engineering (CSE) is one of the youngest departments at SUSTech, established in February 2016. All faculty members had taught or conducted research overseas before joining CSE. We aim to grow rapidly in the coming years, with the goal of having 50 tenure-track professors in the next few years and aiming to become an internationally known and research intensive department.

CSE has five research concentrations:
Artificial Intelligence;
Data Science;
Autonomous and Cognitive Systems;
Computer Systems and Networks; and
Theoretical Computer Science.

Our research topics cover many areas such as machine learning, computational intelligence, smart logistics, autonomous vehicles, big data, cloud computing, Internet of Things (IoT), intelligent devices, mobile communications, software engineering, network security and cryptography.



Department of Biomedical Engineering

Undergraduate Major(s):

Biomedical Engineering

Faculty:

1 Distinguished Young Scholar of the Chinese National Science Foundation

1 Outstanding Young Investigator of the Chinese National Natural Science Foundation.

The Department of Biomedical Engineering (BME) was established in June 2016. The Department currently has 12 core faculty members, including a Distinguished Young Scholar of the Chinese National Science Foundation, an Outstanding Young Investigator of the Chinese National Natural Science Foundation. Research areas include mechanomedicine,multiscale/multimodal biomedical imaging, wearable devices and wireless monitoring, biomedical MEMS, de novo regenerative engineering, computational medicine for big data and health informatics.

BME receives strong support from colleagues at Columbia University in the City of New York and has formed its own undergraduate curricula based on the curricula of Columbia University in the City of New York. BME cultivates students at bachelor, master and PhD levels in collaboration with the programs at Columbia University in the City of New York.

BME sincerely welcomes more global talents to join us to create an interdisciplinary innovative research platform, and make the platform a world- class biomedical engineering program.

Department of Finance

Undergraduate major(s):

Finance

Financial Engineering

Graduate program(s):

Mathematics (research area in Finance)

Faculty:

1 SUSTech Distinguished Young Scholars recipient

7 Overseas high-level talents

1 Established the "Theoretical Analysis Framework of China's Financial System"

14 have study experiences at overseas universities

9 have work experiences in financial institutions

The Department of Finance was established in 2015, and has benefitted enormously from the rapid development of Shenzhen and the Guangdong-Hong Kong-Macau Greater Bay Area. The Department has formed several joint Ph.D. programs with top universities, including the University of Hong Kong and the Hong Kong University of Science and Technology.

Research areas cover China's financial stability, the block chain governance model, legal issues and constructing a case library, comprehensive economic forecasts, and machine learning for financial modeling.

In 2018, the Center for Financial Technology and Financial Innovation of SUSTech was approved as one of the first seven key research bases of Humanities and Social Sciences and SUSTech. The Department is also preparing to build the Joint Actuarial Center with Yingshang Technology.

The Department of Finance encourages its students to participate in competitions and professional exams to enhance their career prospects, including the HSBC Business Case Competition, the CFFE Cup Financial Derivatives Knowledge Competition, the SOA Examination, the Munich Re Cup Actuarial Insurance Competition for College students and the CFA Society Investment Analysis Competition. The Department of Finance has developed relationships with many financial institutions to help students get internships.

Through lectures by a strong faculty and elite guest speakers from industry, high-end internships and rigorous professional competitions, the Department has ensured that students are provided with the best theoretical knowledge and critical thinking skills to enable them to solve the economic and financial problems of the new era.

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2019-5-23