The mission of Shanghai Jiao Tong University is to preserve cultural heritage, seek truth, and nurture global talent for China and the rest of the world.
Shanghai Jiao Tong University, a cradle of higher education in China, has a legendary past. Nanyang College is the predecessor to Shanghai Jiao Tong University. Since its establishment in 1896, it has been one of China's top universities. The university’s path to greatness exemplifies the modernization of China’s higher education. As a leading university in China, it was founded with an urgent mission: to save a nation in peril by training and educating the next generation to lead and transform the country. Now, with China’s rise in an increasingly interconnected world, SJTU has become one of the world’s top 100 universities and is continuing on this trajectory into the future.
Zhao Jiaxin
(Undergraduate, Mechanical Engineering, China)
Jiaxin received a Rhodes scholarship and is now pursuing postgraduate studies at the University of Oxford.

“My experience at SJTU equipped me with critical thinking and practical skills. I received rigorous scientific training and critical liberal education.”

Xie Yutong
(Undergraduate, Zhiyuan College, China)
Yutong placed highly in multiple domestic and international contests, including a championship in the ACM contest.

“I especially enjoyed my time on the SJTU ACM team. The university offered the best environment I could imagine to help us prepare for the contest.”

Zhang Xinjian
(Undergraduate, Pharmacy, China)
Xinjian visited Ethiopia as a group leader of the 2019 Africa Pharmacopeia project of the SJTU Global Engagement Program, conducting research on the African healthcare system and herbal medicine.

“Through the SJTU Global Engagement Program, I was deeply involved in research on the African healthcare system. This life-changing experience cultivated my sense of responsibility and expanded my global vision.”

Zhou Xinyi
(Undergraduate, Physics and Astronomy, China)
Xinyi won first prize in various international contests, such as ACM, and published 10 journal papers. He now holds 11 patents.

“During my Ph.D., I was given many opportunities to attend international academic conferences, such as the Global Young Scientists Summit. I was inspired by face-to-face interactions with top scientists.”

Nicola Lundsbjerg
(Masters, International and Public Affairs, Denmark)
Nicola was nominated as a Star of International students at SJTU. He also wrote and recorded the song “Overcome” to encourage people during the coronavirus pandemic.

“My experience at SJTU is a lot more than just a classroom. It is a community. I learned a lot from working with people originating from all kinds of cultural and professional backgrounds.”

Zhang Tianqing
(Undergraduate, Physics and Astronomy, China)
Tianqing served as a leader of the Astronomical Union and Vice President of the Student Union. He is now pursuing a dual degree with SJTU and Duke University.

“SJTU provided a world-class education system and research labs for me as an undergraduate. These opportunities empowered me to gain knowledge at the fastest rate in my lifetime.”

Ma Jiaojiao
(Masters, Media and Communication, China)
Jiaojiao was awarded the honorary title of “Coronavirus Prevention and Control Outstanding Student” by the Henan Provincial Party College Working Committee and the Provincial Department of Education.

“SJTU has a tradition of encouraging students to volunteer for the community. Under the influence of the excellent volunteerism atmosphere in the school, I also actively engaged in volunteer work.”

Liu Zhizhuo
(Masters, Environmental Science and Engineering, China)
Zhizhuo was named 2020’s “Distinguished University Student.” Since 2016, he has been working to help combat desertification and poverty.

“SJTU helped me broaden my horizons. I went to the Tengri desert at Gansu Province to carry out wind and sand control work with the knowledge I learned at school.”

Amanda Florian
(Masters, Media and Communication, USA)
Amanda is preparing to launch a new media application start-up at the SJTU incubator platform, NeoBay.

“There’s no doubt SJTU is one of the highest-ranked schools in all of China, but the reason I cherish it the most is for its excellent professors and campus culture.”
Zha Qiongfang  
School of Medicine

Dr. Zha joined the first medical team that was dispatched to aid Hubei during the outbreak in late January 2020. As the only female doctor on SJTU’s medical team sent to Hubei, she posted a daily journal recording the battle against the emerging pandemic from the perspective of a front-line doctor and the book “Dr. Zha’s Diary on Fighting the COVID-19” is published in Chinese, English and Japanese. It helps readers around the world better understand China's experience in bringing the epidemic under control.

Ma Lizhuang  
School of Electronic, Information and Electrical Engineering

Professor Ma is one of the winners of the 2020 Shanghai Jiao Tong University Scientific and Technological Progress Award. His research field is human visual expression understanding and posture analysis technology and its application: human visual expression understanding and posture analysis technology is the core technology of building smart city public security. This technology can be used to solve current social governance problems, such as public security challenges presented by a large population, long-distance nuclear problems in national security, and public online entertainment based on character-recognition technology. The technology has made a great contribution to social governance and epidemic prevention and control and promoted the artificial intelligence industry's progress.

Fan Chunhai  
School of Chemistry and Chemical Engineering

Professor Fan was awarded the title of "National Advanced Worker" in 2020. Fan Chunhai, who was elected academician in the Chinese Academy of Sciences at the age of 45, has made remarkable achievements in research fields such as DNA self-assembly, DNA storage, molecular machines, and others over the past 20 years. He won second prize in the National Natural Science Award. He has been committed to the transformation of fundamental research results to clinical practices to benefit human health. He led his team in focusing on new methods of nucleic acid analysis, diagnosis, and treatment to bring about clinical transformation and cooperate with hospitals to use nucleic acid sensors in the detection of actual clinical samples.

Wang Zhenyi  
School of Medicine

Dr. Wang was awarded the 2020 “Life Science Award” for his contributions to finding a cure for acute promyelocytic leukemia. He has committed all his future earnings from any science awards to be donated to the Foundation for Poverty Alleviation. Saddened by the many people whose lives are still taken by various kinds of leukemia, he has called more young scientists to be creative and pursue scientific breakthroughs in leukemia research.

Guo Minyi  
School of Electronic, Information and Electrical Engineering

Professor Guo was elected to the European Academy of Sciences in 2020. Professor Guo is primarily engaged in research in parallel and distributed computing, big data and program optimization.

Anders Lindquist  
School of Electronic, Information and Electrical Engineering

Dr. Lindquist was elected to the European Academy of Sciences in 2020. He has made essential contributions in researching optimization theory of complex systems in the Department of Automation. He has also been elected as a foreign academician of the Chinese Academy of Sciences, a foreign academician of the Russian Academy of Natural Sciences, and a member of the Swedish Royal Academy of Sciences.

Fu Shixiao  
School of Naval Architecture, Ocean and Civil Engineering

Professor Fu was elected to the Norwegian Academy of Technical Sciences in 2020. His primary research is in Fluid-structure interactions, Vortex-induced vibration (VIV), Hydro-elasticity of floating structures, Fish farming structures, Floating bridges, and Risers.

Deng Zhixin  
School of Life Sciences and Biotechnology

Professor Deng is an academician of the Chinese Academy of Sciences and was elected the first chairman of the Global Society for Industrial Microbiology, which was previously the International Committee of Industrial Microbial Genetics. This society is an unofficial academic leadership organization composed of well-known experts in industrial microbiology from ten countries around the world.

Kong Hainan  
School of Environmental Science and Engineering

Professor Kong promoted the eco-green development of Dali and won recognition and support from the local government. In 2019, he donated 2 million RMB to set up a SJTU education fund for nurturing talents to protect Erhai.
SJTU has nurtured more than three hundred thousand prominent alumni in the fields of politics, science, business, and arts. SJTU alumni have helped to shape China you know today and affected the rest of the world.

In 2020, SJTU alumni achieved great accomplishment in their business fields, such as being winners at the "Forbes 2020 China’s best venture capital", "2020 China’s 50 most influential business leaders", "Shenzhen Special Economic Zone 40th anniversary: the innovative and entrepreneurial figures and advanced role models". Also, SJTU scholars were appointed to the Canadian Academy of Engineering, Singapore National Academy of Sciences, and other honors lists.

Jiang Zemin (Class of 1947)
Former President of China

Qian Xuesen (Class of 1934)
Scientist, Father of Chinese Aerospace

Jiang Zemin
Qian Xuesen

Lu Yan (Class of 1948)
Actress, Golden Horse Award winner, Former jury member for the Academy Awards

Yao Ming (Class of 2018)
Former NBA basketball player

Lu Yan
Yao Ming

Zhu Zhenghong (Class of 1989)
Canadian Academy of Engineering

Pei Jian (Class of 1993)
Canadian Academy of Engineering

Lian Yong (Class of 1984)
Canadian Academy of Engineering

Yu Hao (Class of 1997)
Singapore National Academy of Sciences

Zhu Zhenghong
Pei Jian
Lian Yong
Yu Hao

Tang Renyuan (Class of 1952)
2020 Alumni for Contribution Memorial Award

Yang Yuanqing (Class of 1986)
Fortune 2020 China's 50 most influential business leaders

Shen Nanpeng (Class of 1988)
Fortune 2020 China's 50 most influential business leaders

Xu Li (Class of 2007)
Forbes 2020 China's best venture capital

Tang Renyuan
Yang Yuanqing
Shen Nanpeng
Xu Li

Yao Ming

Lu Yan

SJTU ALUMNI
SCHOOLS AND PROGRAMS

Sciences
School of Mathematical Sciences
School of Physics and Astronomy
School of Chemistry and Chemical Engineering
Zhiyuan College
School of Oceanology

Engineering
School of Naval Architecture, Ocean and Civil Engineering
School of Mechanical Engineering
School of Electronic, Information and Electrical Engineering
School of Materials Science and Engineering
School of Environmental Science and Engineering
School of Biomedical Engineering
School of Aeronautics and Astronautics
College of Smart Energy

Life and Medical Sciences
School of Life Sciences and Biotechnology
School of Agriculture and Biology
School of Medicine
School of Pharmacy

Humanities and Social Sciences
Antai College of Economics and Management
KoGuang Law School
School of Foreign Languages
School of Humanities
School of Marxism
School of International and Public Affairs
Department of Physical Education
Shanghai Advanced Institute of Finance
School of Design
School of Education

Joint Institutes
UM-SJTU Joint Institute
SJTU-Paris Tech Elite Institute of Technology
USC-SJTU Institute of Cultural and Creative Industry
China-UK Low Carbon College
China Europe International Business School

EDUCATION

Educational Philosophy
SJTU’s educational philosophy prioritizes values development, knowledge exploration, capacity building, and personality cultivation as it seeks to produce future academic, political, industrial, and cultural leaders.

Educational Process
SJTU’s core objectives in undergraduate education are to provide a student-centered education, to promote excellent teaching, research, scientific literacy, and community service, and to combine the best of classroom teaching and practical learning. First-year students can choose from more than 260 seminar courses, primarily focusing on independent learning through exploration and research, with significant interaction with professors. The university seeks to combine wide-caliber professional education with a high-quality broader general education by providing students with a wide variety of elective courses, including more than 200 core elective courses in humanities, social sciences, natural sciences, and engineering science and technology. All courses at SJTU seek to provide an innovative and practical teaching system to cultivate students’ practical ability, scientific thinking, and innovative spirit. For postgraduate education, the university strives to reform the discipline structure, employ a group supervising system, pursue a global standard assessment system, and strengthen cooperation between industry and the university. SJTU fully leverages its advantage as one of the country’s top higher education institutions leading comprehensive reformation of doctoral and professional degree education.
The Zhiyuan Honors Program aims to equip the future’s leading scientists to better serve society with creativity, critical thinking, and knowledge of science and technology. The top 10% of undergraduate students are qualified to enroll in the program. Numerous top academics serve in the program, including Chinese Academicians and Turing Award winner John Hopcroft. More than 90% of Zhiyuan undergraduates pursue an academic career after graduation, with many furthering their studies in the world’s top universities, such as MIT, Stanford, Harvard, and Oxford. The Zhiyuan Honors Program has now expanded to doctoral programs, with a cohort of the top 100 doctoral students participating each year. Honors courses provide students with a solid research foundation, and they are each supervised jointly by two tutors, one within the university and one from outside the university.

https://zhiyuan.sjtu.edu.cn/html/zhiyuan/
https://www.gs.sjtu.edu.cn/zjjs/sszyryjh.htm

Over the years, SJTU has worked with various international partners to form joint institutes at SJTU to pursue a truly global education. These joint institutes are the CEIBS (created in 1994), the UM-SJTU Joint Institute (created in 2006), the SJTU-Paris Tech Elite Institute of Technology (created in 2012), the USC-SJTU Institute of Culture and Creative Industry (created in 2015), and the China-UK Low Carbon College (created in 2017).

SJTU takes various approaches to encourage students’ active participation not only in class but also in self-directed learning. With the goal of “promoting education fairness, enhancing education innovation, and improving education quality”, a series of pioneering endeavors has been carried out. Since the COVID-19 outbreak, all school departments have worked together to implement a policy of “stop classes, but non-stop studying and teaching” and accelerate the in-depth integration of education and teaching. Each college’s leaders and all teachers in the classroom work together to continuously optimize the “mixing.” More than 7,900 online courses were put online throughout the year, and the total number of views on the school’s online Canvas platform was more than 80 million, which ensured the smooth operation of various learning tasks. SJTU also held conferences to improve online classes.

SJTU strives to nurture innovative and entrepreneurial talents for tomorrow with various innovative supports for students. The university has developed a rich and diverse set of offerings to meet the needs of students. The regular entrepreneurship curriculum and experiences give students the skill set needed to be successful. Opportunities, funding, and connections provided by the School of Entrepreneurship and Innovation enable students to turn their ideas into real businesses. Also, students at SJTU can conduct their experiments for free by utilizing the facilities and equipment at the Student Innovation Center, a fab-lab where they have launched various training courses to enable students to collaborate with global leading companies such as HUAWEI, Intel, IBM, Microsoft, and Tencent.

http://chuangye.sjtu.edu.cn/index.php/Home/index
https://www.si.sjtu.edu.cn/
Overseas Centers/Offices

Four overseas centers/offices in Singapore, Bulgaria, France, and the United States are part of SJTU’s globalization efforts. SJTU aims to expand its cooperation and exchanges, recruit international minds and students, and enhance its international influence.

International Contests

SJTU has a remarkable record in various international contests. More than 2,000 students won awards from 2016 to 2019. SJTU has won the ACM World Championship 3 times, receiving 6 gold medals in total. SJTU won 2 gold medals in the 2019 iGEM Competition. Furthermore, in the 2020 MCM/ICM Competition, 3 Outstanding Winners and 20 Finalists were from SJTU. In addition to these examples, SJTU has had notable achievements in various international contests, such as the VEX Competition, Odyssey of the Mind, the Red Dot design competition, the International University Sports Federation, and more.

Joint/Double Degree Programs

Through academic cooperation with international partners, SJTU offers joint/double Bachelor’s, Master’s, and Ph.D. degrees. In 2020, SJTU signed a seed fund and doctoral co-training agreement with the University of Melbourne and a doctoral co-training agreement with the Royal Institute of Technology in Sweden. Our international partners include:

**JOINT PH.D.**
- Heidelberg University
- National University of Singapore
- The University of Melbourne
- University of Toronto
- ...

**DOUBLE MASTER’S**
- KTH Royal Institute of Technology
- Purdue University
- Northwest University
- The University of Edinburgh
- ...

**DOUBLE PH.D.**
- University of Nottingham
- INSA Lyon
- University of Technology Sydney
- Osaka University
- ...

**DOUBLE BACHELOR’S**
- Cornell University
- University of Michigan
- The University of Hong Kong
- University of Maryland
- ...

2020 SJTU Study Abroad Fair

In 2020, the 5th Global University Overseas Education Exhibition of Shanghai Jiao Tong University was held on December 8-10, attracting more than 30 well-known universities from the United Kingdom, Germany, France, Japan, Australia, Singapore, and other countries and regions. More than 3,000 SJTU students participated in online communication and interaction during this exhibition.

- **80** Undergraduate programs for internationals
- **97** Graduate programs for internationals
- **51** Global summer programs
- **127** Summer research internship programs
RESEARCH AND INNOVATION

We are serving the community and contributing to a better future for humankind by exploring:

- new horizons for human well-being
- the secrets of the universe
- the deepest parts of the ocean
- the fundamentals of the human body
- environmental innovations to create harmony between nature and humanity

We are encouraging cross-disciplinary research and research platforms in these areas:

- Megacities Planning, Human Health, Artificial Intelligence, and Oceans and Seas.
Female germ cells include primordial germ cells, female germ stem cells, and oocytes. Oocytes are the key cells for females to perform reproductive functions. The decline in their quality and quantity will lead to the increase in female infertility and human birth defects, as well as the decline in livestock fertility and the increase in the number of endangered animals. Therefore, understanding the mechanism of female reproduction in order to improve the quality and quantity of oocytes has become a key scientific issue that needs to be resolved internationally. This important discovery revealed the existence of reproductive stem cells in the ovaries of adult mammals, opening up a new field of research.
The Fraunhofer Project Center for Smart Manufacturing at Shanghai Jiao Tong University is the 10th Fraunhofer Project Center in the world officially approved by the Fraunhofer Association of Germany. It is also the first Fraunhofer Project Center in China. This cooperation is a powerful combination of German Industry 4.0 and high-level research institutions in China’s intelligent manufacturing. It creates a new model for international top non-profit scientific research institutions to enter China to carry out in-depth cooperation and to build a smart manufacturing innovation center with global influence in Shanghai.

The Laboratory of Metabolic and Developmental Sciences is a platform for world-class international collaboration in researching the fields of metabolism and developmental sciences. The lab’s research focuses on three major areas: a) the genetics and biochemistry features of metabolism, b) the interactions between metabolism and development, and c) novel biotechnologies in metabolism engineering and developmental science. Research conducted in collaboration with MIT revealed the chemical and biological nature of DNA phosphorothioate modification and explained the heterogeneity and low modification frequency of DNA phosphorothioate in microbiology. These results led to a new research focus on epigenetics. Research conducted in collaboration with labs in the UK, Australia, and Korea on the molecular regulation of male fertility in rice made important discoveries that can be used to evaluate the bio-safety of GMOs.

The International Science and Technology Cooperation Base of National Engineering Research Center for Nanotechnology

The International Science and Technology Base aims to promote collaborations between China and the rest of the world. The base focuses on five research areas: nano-biomedicine, nano-functional materials, nano-energy, nano-information, and nano-environment. During the novel coronavirus pandemic, the base has collaborated with the Center for Immunology and Vaccinology at the Imperial College of Technology in London to research therapeutic antibodies and vaccines to combat the virus. This project received funding and support from the British International Cooperation Fund.

In 2020, Shanghai Jiao Tong University and the National University of Singapore jointly established the International Joint Laboratory for Energy and Environmental Sustainability in Megacities. To solve the complex challenges and critical issues involved in the sustainable development of the energy environment in megacities, they established a network of the two places to provide innovative systems and platforms for cooperation between governments, regions and cities. The collaboration project of energy and environmental sustainability in megacities has deep cooperative accumulation and complementary effects based on a 9-year joint study by two universities.
After years of hard work, Eryuan County had limited poverty by official standards by 2018. Shanghai Jiao Tong University focuses on the fields of agriculture, ecology, education, medical and health care. While alleviating poverty, the university also seeks to assist local education. As of 2021, the university has arranged a total of 65 graduate volunteers for 8 sessions to go to Eryuan to support teaching.

During the epidemic, a total of 570 SJTU medical staff from Jiao Tong University rushed to the front lines in Wuhan to help build what became termed “The Great Wall in White” to stop the epidemic, coupling ideals in medical ethics with practical actions. At the same time, there were 182 SJTU medical workers supporting the Shanghai Public Health Center.

After an extended effort, China announced that it had eliminated extreme poverty within its borders. SJTU was devoted to fighting against poverty and furthering social well-being in China. Four SJTU members, Wang Xinze, Chang Zhubin, Di Jianzhong and Zhao Jian, and a medical surgery team, Department of Surgery at Xinhua Hospital, affiliated with Shanghai Jiao Tong University, were given the honor for the "National recognition on the Anti-poverty".
CAMPUS LIFE

MUSIC AND PERFORMANCE ART

SJTU believes art makes the world a better place. Every year, numerous art performances are held on SJTU’s campus so that students and faculty members can enjoy and take part in the performances throughout the year. Even the pandemic cannot stop SJTUers. Many students produced short videos, including music videos and choirs, to encourage each other online.

SPORTS

Many athletic activities are available to students at SJTU. Of particular note, the Dragon Boat Rowing Club scores highly at an annual dragon boat competition. Every spring, students and faculty members enjoy cheering on the dragon boat races that take place on the lake on campus.
SJTU has partner relationships with more than 150 institutes around the world. In addition, the university operates four overseas offices, located in Bulgaria, Singapore, France, and the US.

SJTU is a member of the following international associations: