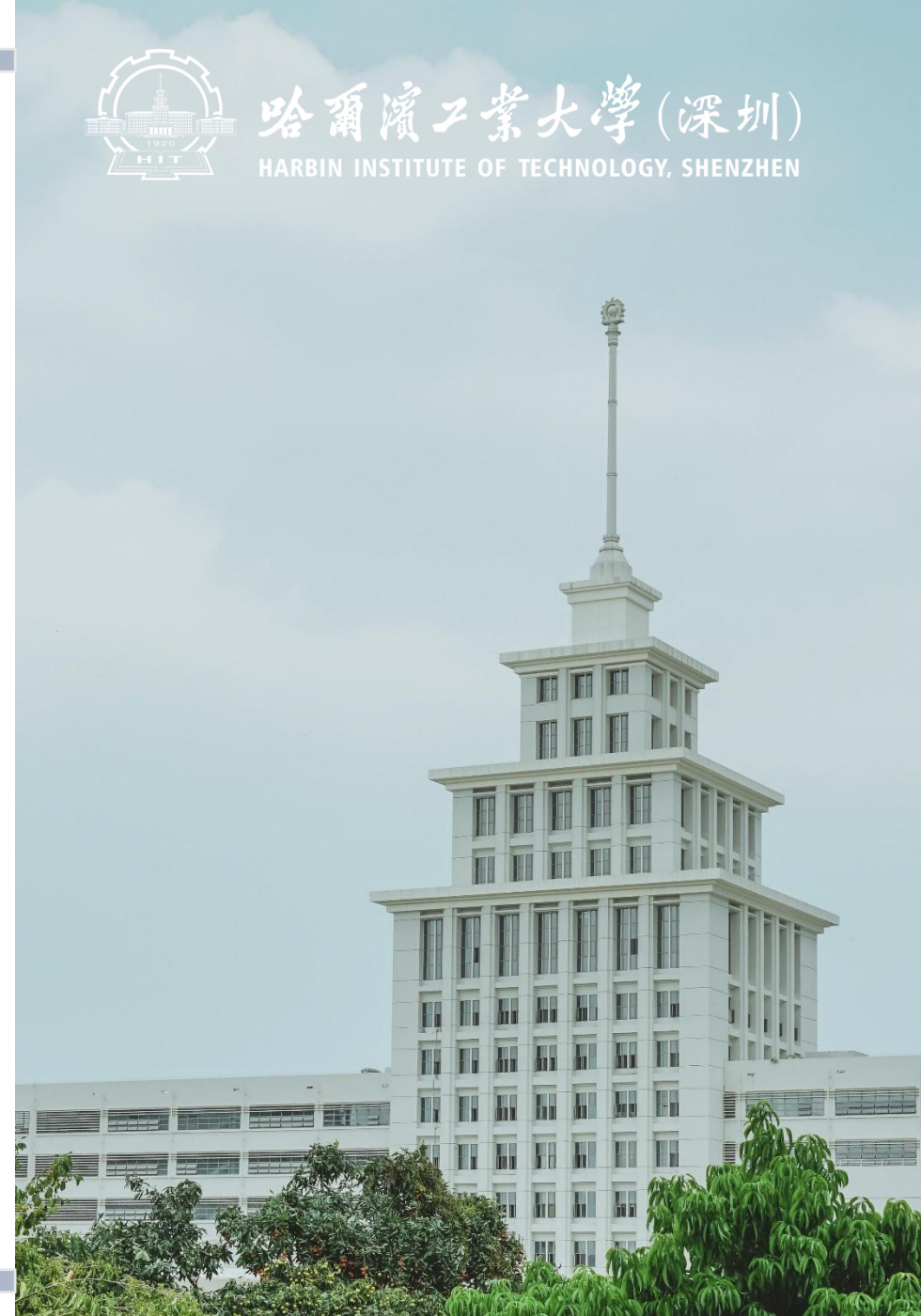


# **HARBIN INSTITUTE OF TECHNOLOGY, SHENZHEN**

**INTERNATIONAL OFFICE**  
**Oct. 2020**



**哈爾濱工業大學(深圳)**  
HARBIN INSTITUTE OF TECHNOLOGY, SHENZHEN





# CONTENTS

- ◆ History & Background
- ◆ Student Cultivation
- ◆ Research Prospectus
- ◆ International Cooperation
- ◆ Future Plan



# History & Background

# One University Three Campuses



Harbin Institute of Technology, Harbin

1920



1985

Harbin Institute of Technology, Weihai

2002



Harbin Institute of Technology, Shenzhen

# One University Three Campuses



# HISTORY

## HIT

- 1920 Founding of Harbin Sino-Russian School for Industry
- The First Batch of Universities in Project 211
- 1999 One of the Top Universities in Project 985
- 2009 A Member of Top Nine University Consortium (C9)
- 2016 First Batch of Double First-Rate Universities

## HITSZ

- 2002 HIT Shenzhen Graduate School Approved by Ministry of Education
- Start Enrollment of Postgraduate Students (Master & PhD)
- 2016 Start Enrollment of Undergraduate Students
- 2020 First Batch of Undergraduate Students To Be Graduated

# Ranking

US  
News

Best Global Universities for Engineering 2020

TOP6

U.S. News & WORLD REPORT

ARWU and its content have been widely cited and employed as a starting point for identifying national strengths and weaknesses as well as facilitating reform and setting new initiatives

Academic Ranking of World Universities 2016- Engineering

ARWU

TOP9

世界大学学术排名  
ACADEMIC RANKING OF WORLD UNIVERSITIES



# Fact & Figures

*Last Updated Sep 31, 2020*

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**7,891** Students

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**949** Staff

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## 513 Faculty:

- **3713** Undergraduates
  - **3152** Master candidates
  - **897** Phd candidates
- **8** Academician
  - **36** National Level Scholars
    - Changjiang Scholars
    - NSFC Distinguished Young Scholars
  - **28** National Level Talents
    - Thousand Young Professionals
    - Outstanding Young Talents
    - Changjiang Award Talents
    - NSFC Young Talents



## 2 Schools

**10 Schools 4 Research Institutes**

School of Computer  
Science and  
Technology

School of Civil and  
Environmental  
Engineering

School of Science

Institute of Space  
Science and Applied  
Technology

School of Electronic  
and Information  
Engineering

School of Materials  
Science and  
Engineering

School of  
Economics and  
Management

Institute of Intelligent  
Marine Engineering

School of  
Humanities and  
Social Sciences

Institute of Special  
Environment Material  
Science

School of  
Mechanical  
Engineering and  
Automation

School of  
Architecture

School of  
Marxism

Green Pharmaceutical  
Engineering Research  
Center

# 3 Disciplines

6 Fields 23 First-level Discipline



8 National Key Disciplines



13 Level A Disciplines in The Fourth Round China Discipline Ranking



7 Double First-Rate Initiative Subjects



4 Key Construction Disciplines in 'High-level University Construction Plan' in Guangdong Province



Tsinghua University Shenzhen Graduate School

Peking University Shenzhen Graduate School

Library

Swimming Pools, Outdoor & Indoor Stadium

Cluster of Key Laboratories

Harbin Institute of Technology, Shenzhen

哈尔滨工业大学（深圳）

清华大学  
深圳国际研究生院

大学城体育中心

清华大学

University Town





# Student Cultivation

Peking University		1
Tsinghua University		2
Shanghai Jiao Tong University		3
Fudan University		4
Zhejiang University		5
University of Science & Technology		6
Nanjing University		7
Renmin University of China		8
Beihang University		9
Tongji University		10
Harbin Institute of Technology		11

Undergraduate students enrollment has seen huge improvement in 20 provinces in 2019, as lowest admission score has surpassed key university admission score for over 100 points in 18 provinces except for Zhejiang and Jiangsu Provinces.

HITSZ ranks 11 in double first-rate universities and ranked 13 among all universities in China.



# 1

## Study Space



Lecture Room



Group Interaction Room



Multi-screen Discussion Room



Remote Record Classroom

# 1 Study Space



Network Interaction Classroom



Multi-screen Discussion Room



Multi-view Discussion Room



Discussion Room





## 2

# Laboratory for Undergraduate Education

- **903 million RMB** invested by Shenzhen government to support construction of 3 science centers and undergraduate teaching laboratories
- Develop Experimental and Innovative Practical Education Center, in accordance with the principle of "decentralized planning, centralized construction, unified management, coordinated operation"
- **100** laboratories with **14600m<sup>2</sup>** has been built to complete experimental teaching tasks
- **136** experimental courses attended by **278,000** students earned accreditation from HIT experts



Intelligent Manufacturing Laboratory



Laser Processing Laboratory



Electronic Technology Laboratory



Automatic Control Laboratory



## 3 Achievements

- HITSZ has enrolled **14,000** full-time graduate students since **2002**, accounting for **20%** of full-time graduate students enrolled and trained in Shenzhen universities.

Among **11,000** full-time masters and PhD graduates, nearly **60%** employed in Guangdong Province, **52%** in Shenzhen City;

More than **70%** of graduates working in high-tech enterprises and research institutes

In the past 5 years, joined more than **130** enterprises and institutions in Shenzhen

**163** out of **860** graduate in 2019 joined HUAWEI

**342** people joined World 500 enterprises, accounting for 45% of employed students, increased 12% since 2018

**56** people became PhD candidates





Graduation





# Research Prospectus



# 1

## Research Funding

- Research funding continues to grow rapidly every year, around **1.9 billion** in the past 5 years, and nearly **3 billion** in the past years.

## 2 Awards

- **130+** awards : **14** at national level, **49** at Provincial/ministerial



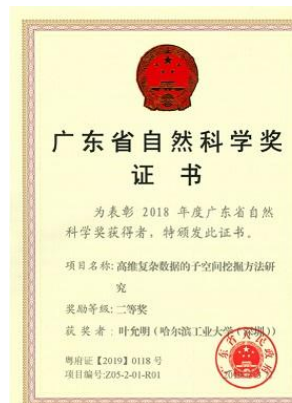
- 2018 National Prize for Progress in Science and Technology – 2<sup>nd</sup> Award  
‘Cyber security situation analysis Key Technology and System YHSAS’



- 2018 Guangdong Province Science and Technology Award – 1<sup>st</sup> Award  
‘Complex high-rise structure seismic design theory and engineering application’



- 2018 National Technology Invention 2<sup>nd</sup> Prize,  
"High ratio energy lithium-ion battery key technology and application"



- 2018 Guangdong Science and Technology Award - 2<sup>nd</sup> Prize of Natural Science Award  
‘Sub-space excavation method of high-dimensional complex data research’

## 3 Research Platforms

### 3 Provincial and Ministerial-level Scientific Research Platform:

- Micro-nano-photoelectric technology and systems Ministry of Industry and Information Technology Key Laboratory
- Guangdong Space Communication and Network Technology Key Laboratory
- Guangdong Advanced Laser Manufacturing Powder Materials and Equipment Engineering Technology Research Center



### 44 Municipal Scientific Research Platforms

# 4 Key Platforms - Key Laboratory Cluster

## 1 Laboratory 2 Campuses

National Key Laboratory for Urban Water Resources and Water Environment

National Key Laboratory for Robotics and Systems

National Key Laboratory for Advanced Welding and Connection

Key Laboratory of National Defense Science and Technology for Tunable Laser Technology

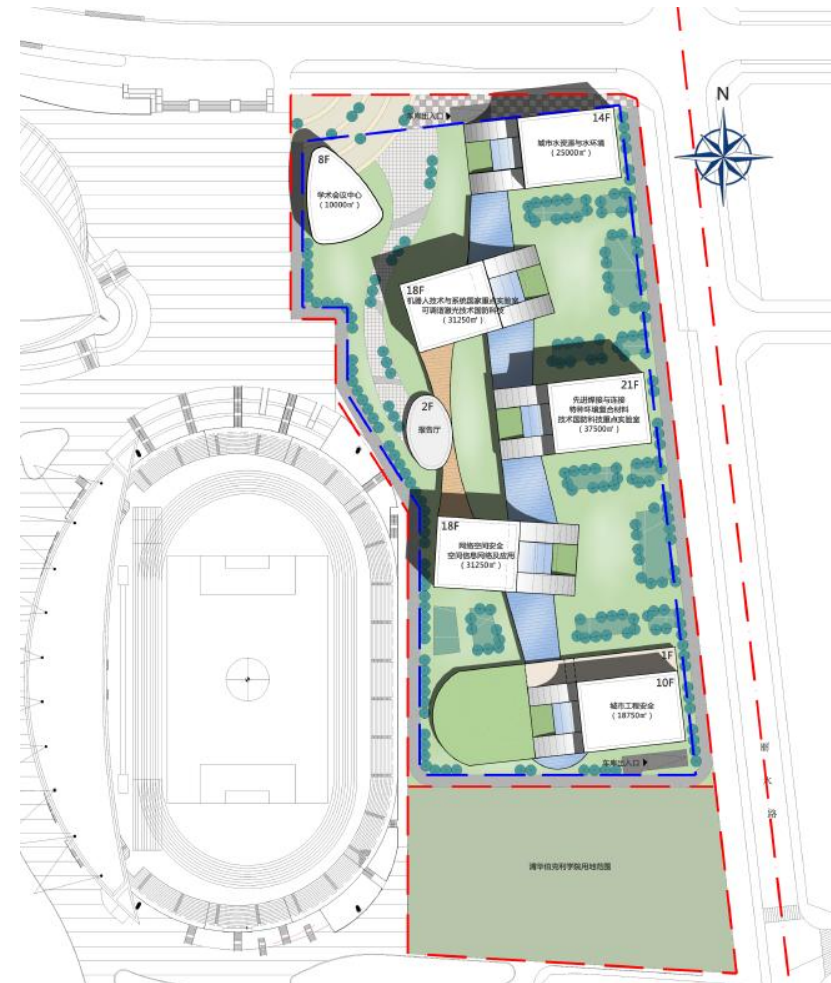
National Defense Science and Technology Key Laboratory for Special Environmental Composites Technology

## Academician

Key Laboratory for Cyberspace Security - Fang Binxing

Key Laboratory for Space Information Network and Application – Liu Yongtan

Key Laboratory for Urban Engineering Security – Ou Jinping







# 4

## Key Platform——Pengcheng Laboratory

- HITSZ contributed to planning, approval and development of Pengcheng Laboratory at its early stage as sole supporting institution
- Pengcheng Laboratory will play significant role in developing fields & disciplines including information, computer, artificial intelligence







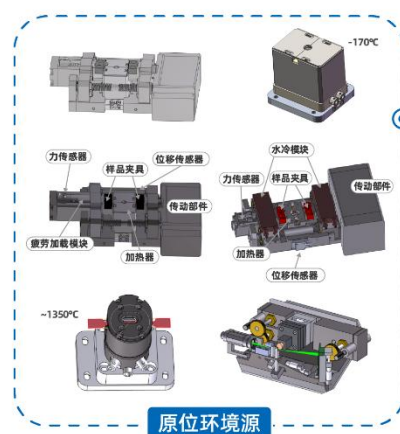
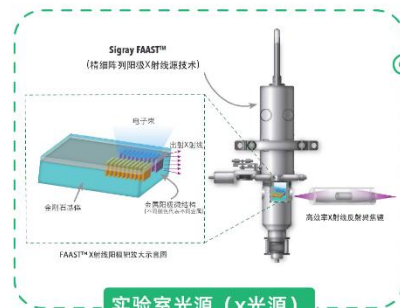
## 4 Key Platform - Special Environmental Materials Science and Application Research Device

➡ Largest and full-featured leading environmental effect in situ analysis characterization online device

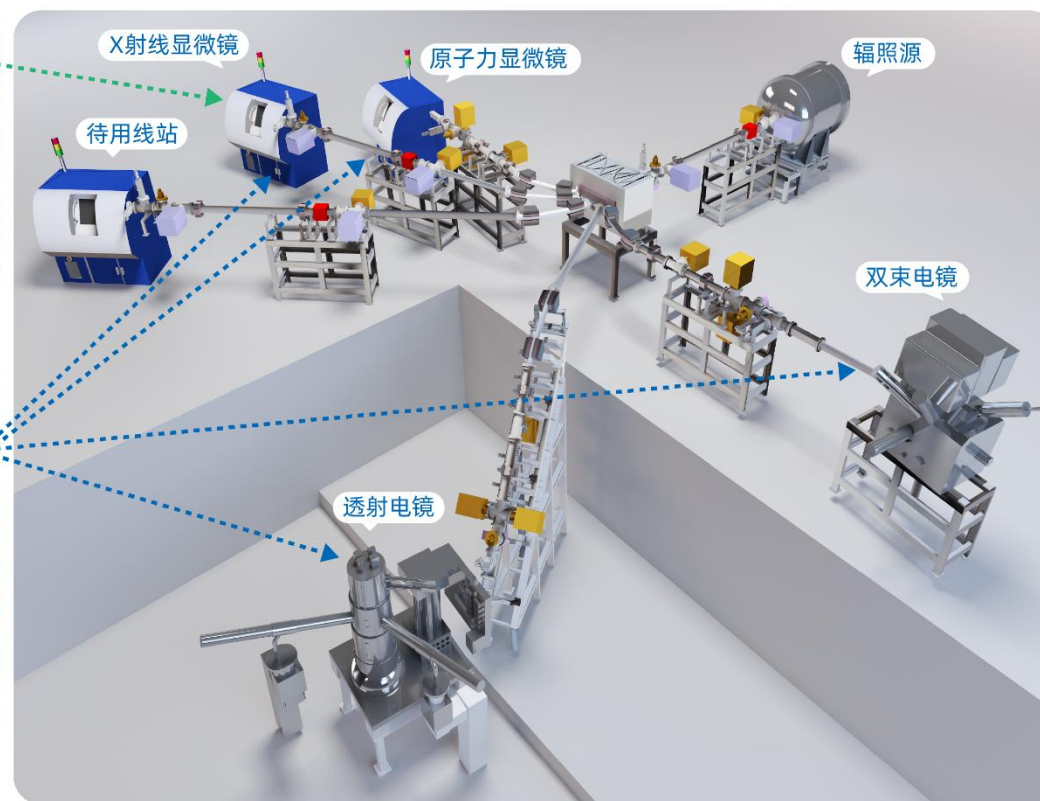
Organic combination of high and low temperature, high pressure, irradiation, corrosion, electromagnetic and other special service environments with materials, device micro-organization, physical structure, chemical composition and service performance analysis characterization and preparation

Provide technical support for new materials research and development, in-service equipment extension, device reliability in Shenzhen, Guangdong Province and even the country

One of the six major sci-tech infrastructure construction categories in Guangming Science City



加载高温、应力、高压、低温等因素



Major sci-tech infrastructure construction in Shenzhen



## 4 Key Platform - Sauvage Laboratory of New Intelligent Materials



Cooperate with 2016 Nobel Laureate in Chemistry Jean-Pierre Sauvage

Aiming at the forefront of intelligent new materials development, conduct basic scientific research in the field of materials to solve major scientific problems in materials science and engineering, combined with the development of the scientific and technological industry in Shenzhen.

Established on Apr. 12, 2019.

5

## Main Research Areas

Research Institute of Aerospace  
Equipment and Intelligent Manufacturing

Institute of Hydrogen Energy and Fuel Cell

Research Institute of International  
Artificial Intelligence

Research Institute of Aerospace  
Science and Technology

Research Institute of Future Information



Research Institute of Material  
genetics and big data

Research Institute of Blockchain  
Development

Flexible Printing Electronic Center

*Planning:* Interdisciplinary Institute  
of Medical And Engineering



# International Cooperation

# 1 International Talents

- **Principle:** Foster innovative talents with HIT Standards and international norms;
- **Outbound pathways:** international conferences, internships, summer schools, field trips, exchange/visit programs and joint degree programs;
- 41% courses taught in English;



Student awarded on 2018 Oxford  
Model United Union



Students in University of British Columbia





## 2

# Expand Partner Network, Deepen Partnership

- Sep 21, 2019, HITSZ Partner University Education Fair invited **22** partners from **United Kingdom, United States, Australia, Canada, Sweden, France, South Korea, Israel and China Hong Kong** to share outbound programs with students from HITSZ, University Town and Shenzhen.

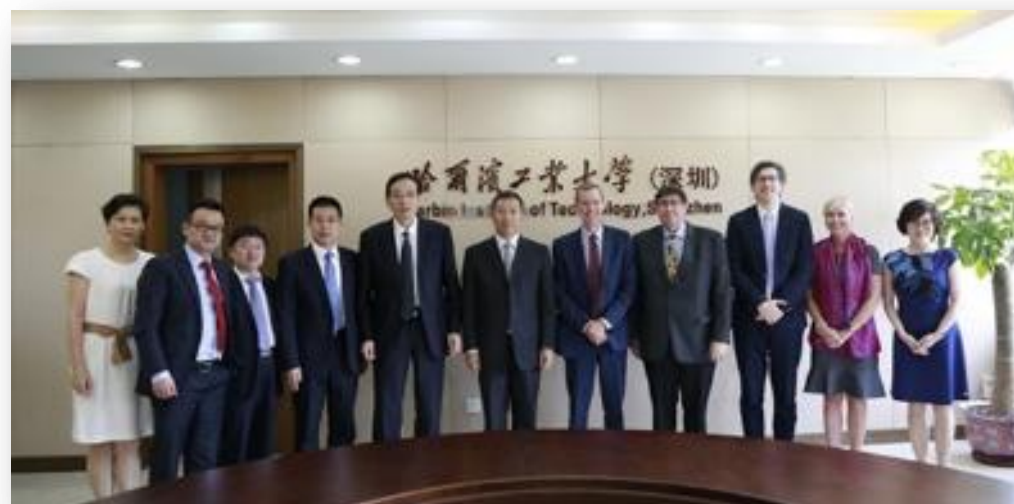


# International Institute of Globalization and Socioeconomic Development

- Jointly developed by HITSZ and Harvard University Kennedy School of Governance and Shenzhen Development Research Center
- As high-end think tank, IIGSD focuses on Global public policy research that covers economics, health, environment etc.
- As training center, IIGSD trains innovative talent with international vision and norms



Shenzhen Party Secretary Meets Prof. Saich  
from Harvard University



Harvard University Kennedy School of  
Governance Delegation visited HITSZ



- July 2015, HIT signed agreement with Shenzhen Municipal Government, Zurich University of Arts and Institute for Advanced Architecture of Catalonia
- March 2019, construction projects was handed over to Shenzhen Municipal Construction Affairs Bureau and under process of public bidding invitation
- July 2019, basically accepted by experts team from Ministry of Education



Signing Ceremony



Meeting with Zurich University of Arts





- 56 Students from Netherlands, United Kingdom, South Korea, Belgium, Singapore and China Hong Kong, Macau joined HITSZ for short-term programs
- Provide featured courses with local characteristics, supported by elite lecturers from 3 campuses
- Join hands with enterprise partners and extend from classroom to real world
- Enhance culture awareness through abundant cultural experiences
- Offers all-around service from accommodation, bed linen, telecommunication and cleaning



**Comprehensive Demonstrative Project for International Students**



# Future Plan



## 3 Future Plan

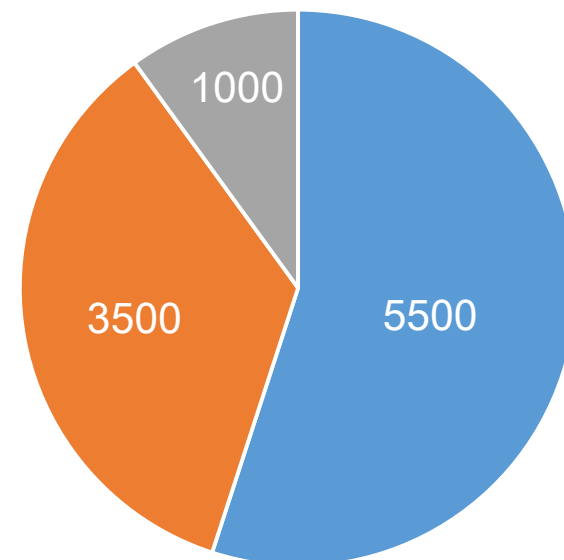
2020

7000 Students on Campus

- 1375 undergraduate students
- 1000 master students
- 300 PhD students

2023

10,000 Students on Campus



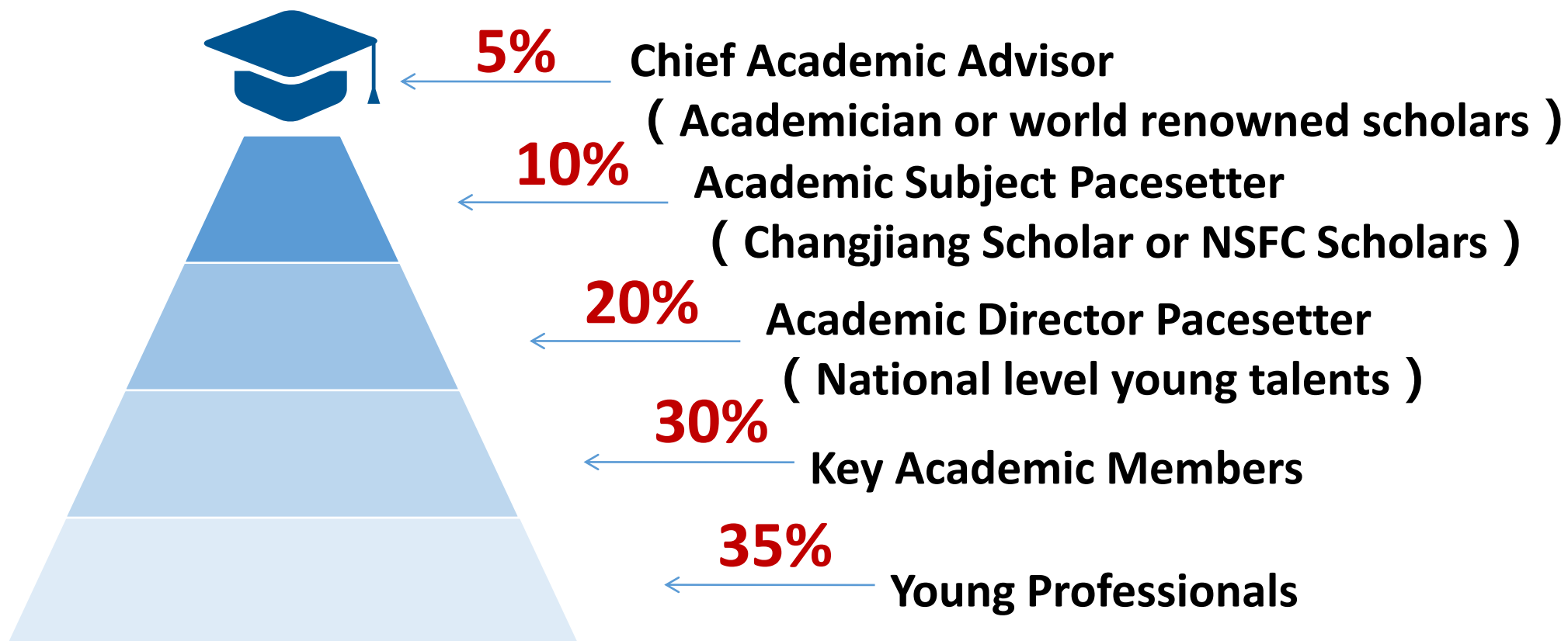
■ Undergrad ■ Postgrad ■ International ■

**Short-term goal :** First-class World Renowned Engineering University

**Long-term goal :** Leading Science & Engineering University in the World

## 3 Future Plan

900 Faculty in 2023



## 4 Key Disciplines & Fields

4 key construction disciplines elected in "High-level University Construction Plan" in Guangdong Province

<b>Materials Science and Engineering</b>
<b>Computer Science and Technology</b>
<b>Mechanical Engineering</b>
<b>Environmental Science and Engineering</b>

12 discipline clusters facing international frontier and significant demand at national & regional level

<b>New Materials &amp; Mechanics</b>	<b>Cyberspace Science &amp; Technology</b>
<b>Intelligent Equipment Manufacturing</b>	<b>Ecological Environment &amp; Sustainable Development</b>
<b>Artificial Intelligence &amp; Big Data</b>	<b>Economics &amp; Management</b>
<b>Physics &amp; Chemistry</b>	<b>Space Science &amp; Space Technology</b>
<b>Design</b>	<b>Marine Engineering</b>
<b>Life &amp; Health Sciences</b>	<b>Clean Energy Science &amp; Technology</b>





# 5

## Space

Current architecture space **427,000m<sup>2</sup>** Architecture space under construction **314,000 m<sup>2</sup>** , Planned investment **2.35 billion RMB** , Total architecture space in the future **740,000 m<sup>2</sup>**



International School of Design  
**10,340,000m<sup>2</sup>**



Key Laboratory Clusters  
**1,870,000m<sup>2</sup>**



High-level Talent Building  
**2,360,000m<sup>2</sup>**