Harbin Institute of Technology

2017 Brief Introduction

Office of Global Affairs 2017
OVERVIEW

Shenzhen Campus
Undergraduate Students : 16,199
Graduate Students : 13,196
Faculty and Staff Members : 5,389
Campus Area : 3,474,900 m²

Weihai Campus
Undergraduate Students : 10,620
Graduate Students : 412
Faculty and Staff Members : 854
Campus Area : 1,228,956 m²

Harbin Campus
Undergraduate Students : 375
Graduate Students : 2,776
Faculty and Staff Members : 586
Campus Area : 141,800 m²
## OVERVIEW

### STATISTICS  (Harbin Campus)

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Members (Full-Time)</td>
<td>3,045</td>
</tr>
<tr>
<td>Professors</td>
<td>1,032</td>
</tr>
<tr>
<td>Academicians of CAS and CAE</td>
<td>38</td>
</tr>
<tr>
<td>Students Enrolled</td>
<td>31,674</td>
</tr>
<tr>
<td>Undergraduate Programs</td>
<td>87</td>
</tr>
<tr>
<td>Master Programs</td>
<td>41</td>
</tr>
<tr>
<td>Doctoral Programs</td>
<td>27</td>
</tr>
<tr>
<td>Academic Schools</td>
<td>18</td>
</tr>
<tr>
<td>National Key Primary Disciplines</td>
<td>9</td>
</tr>
<tr>
<td>National Key Laboratories</td>
<td>10</td>
</tr>
<tr>
<td>Ministry Level Key Laboratories</td>
<td>47</td>
</tr>
</tbody>
</table>
**SCHOOLS**

- School of Astronautics
- School of Electronics and Information Engineering
- School of Mechatronics Engineering
- School of Materials Science and Engineering
- School of Energy Science and Engineering
- School of Electrical Engineering and Automation
- School of Civil Engineering
- School of Architecture
- School of Transportation Science and Technology
- School of Computer Science and Technology & Software
OVERVIEW

SCHOOLS

- School of Chemistry and Chemical Engineering
- School of Life Science and Technology
- School of Environment
- School of Science
- School of Economy and Management
- School of Humanities, Social Sciences and Law
- School of Marxism
- School of Foreign Languages
HIT HISTORY

- 1920  Founding of Harbin Sino-Russian School for Industry
- 1949  First postgraduate program
- 1950’s 1 of 2 university models studying from USSR
  1 of 6 national key universities, the only one outside of Beijing
- 1960’s 23 Majors in 7 Departments
  800 academic staff, 800 students, 67 Russian and Czechoslovakia experts

Campus in the 1920’s
Oral defense for graduation in the 1950’s
Chairman Deng Xiaoping visited HIT in 1958
HIT HISTORY

• 1984 1 of 15 universities to receive preferential support from government
• 1996 The first group of universities in Project 211
• 1999 One of the top universities in Project 985
• 2009 A member of Top Nine University Consortium (C9) in China
• 2013 The first group of universities in 2011 Scheme by Ministry of Education in China
• 2017 The first batch of universities on the list of Double First-Class initiative

Red East 1 Satellite  A Member of C9  Sight of HIT
ACHIEVEMENTS

NATIONAL KEY PRIMARY DISCIPLINES

• Mechanics
• Mechatronics Engineering
• Instrumental Science And Technology
• Materials Science And Engineering
• Power Engineering And Engineering Thermophysics
• Control Science And Engineering
• Computer Science And Technology
• Civil Engineering
• Management Science And Technology

( 9 Disciplines )
NATIONAL KEY LABORATORIES

• Advanced Welding And Joining
• Coal-Burning Pollutants Emission Reduction
• Precision Hot Forming Of Metals
• Robotics And System
• Science And Technology On Advanced Composites In Special Environment
• Space Materials Behavior And Evaluation
• Tunable Laser Technology
• Urban Water Resource And Environment
• National Engineering Laboratory for Sustainable Sludge Management & Resourcelization Technology
• National Engineering Research Center Of Urban Water Resources

(10 in total)
NATIONAL ENGINEERING RESEARCH CENTERS

(4 in total)

- National Engineer Research Center of Urban Water Resources
- Ultra-Precision Machining Research and Application Center for National Defense Science & Technology Industry
- State and Local Joint Engineering Research Center of Cold Region Low Carbon Architecture Technology
- Welding Automation Research and Application Center for National Defense Science & Technology Industry
<table>
<thead>
<tr>
<th>Rank</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MECHANICS</td>
</tr>
<tr>
<td>2</td>
<td>ENVIRONMENTAL SCIENCE &amp; ENGINEERING</td>
</tr>
<tr>
<td>2</td>
<td>CIVIL ENGINEERING</td>
</tr>
<tr>
<td>3</td>
<td>MATERIALS SCIENCE &amp; ENGINEERING</td>
</tr>
<tr>
<td>3</td>
<td>CONTROL SCIENCE &amp; ENGINEERING</td>
</tr>
<tr>
<td>4</td>
<td>COMPUTER SCIENCE &amp; TECHNOLOGY</td>
</tr>
<tr>
<td>4</td>
<td>INSTRUMENTAL SCIENCE &amp; TECHNOLOGY</td>
</tr>
<tr>
<td>4</td>
<td>AERONAUTICAL AND ASTRONAUTICAL SCIENCE &amp; TECHNOLOGY</td>
</tr>
<tr>
<td>5</td>
<td>MECHATRONICS ENGINEERING</td>
</tr>
<tr>
<td>5</td>
<td>OPTICAL ENGINEERING</td>
</tr>
</tbody>
</table>
The U.S. News rankings, based on schools' academic research and reputation, allow students to compare universities around the world.

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.
Research Funding for HIT has been increased over the last decade, it is always among the top 5 in China.
Preliminary engineering costs (CNY millions)

Overall budget: 1,890

- Central monitoring and data processing system: 66.42
- Space zero/weak environment experiment system: 135.19
- Space plasma science research system: 141.61
- Supporting system: 56.54
- Constructions supporting: 84.31
- Budget allowance: 171.72
- Construction engineering: 379.23
- Space integrated environments simulation and coupling effects research system: 790.63
ACHIEVEMENTS

Invention Patents

• HIT was granted 1,444 authorized patents in 2016, making it 3rd among China’s colleges.

• HIT had 5,007 valid patents by the end of 2016, placing it 3rd among China’s colleges.
# SCIENTIFIC PAPERS

<table>
<thead>
<tr>
<th>TYPE OF PAPER</th>
<th>TOTAL AMOUNT</th>
<th>RANKING IN CHINESE UNIVERSITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPCI-S PAPER</td>
<td>1409</td>
<td>4</td>
</tr>
<tr>
<td>EI PAPER</td>
<td>4165</td>
<td>2</td>
</tr>
<tr>
<td>SCI PAPER</td>
<td>2,875</td>
<td>12</td>
</tr>
<tr>
<td>SCIE PAPER</td>
<td>3763</td>
<td>11</td>
</tr>
<tr>
<td>ESI HIGHLY CITED PAPERS</td>
<td>174</td>
<td>9</td>
</tr>
<tr>
<td>ESI HOT PAPERS (LAST 10 YEARS)</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>ESI HOT PAPERS (LAST 2 YEARS)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Top 1% in ESI Papers

- **MATERIALS SCIENCE**: 6933 papers and rank NO. 7
- **ENGINEERING**: 6743 papers and rank NO. 16
- **COMPUTER SCIENCE**: 1272 papers and rank NO. 75
- **MATHEMATICS**: 1190 papers and rank NO. 91
- **PHYSICS SCIENCES**: 4581 papers and rank NO. 114
- **CHEMISTRY**: 3230 papers and rank NO. 132
- **ENVIRONMENTAL SCIENCE AND ECOLOGY**: 774 papers and rank NO. 222
- **BIOLOGY AND BIOCHEMISTRY**: 653 papers and rank NO. 520
The Collaborative Innovation Center of Astronautical Science and Technology

- One of 14 collaborative innovation centers which was first approved by the Central government
- “Two Chief Model”----The Director in Chief from CASC and Engineer in Chief from HIT

2008: Joint Technology Innovation Center of CASC and HIT was founded.
2010: Aerospace Science and Technology Innovation Institute was founded.
2012: The Collaborative Innovation Center of Astronautical Science and Technology was founded.
HIT COLLABRATION WITH AEROSPACE INDUSTRY

Series of Micro & Nano-Satellites

- **2004** ---- Test I (the 1st micro-sat independently developed by a Chinese university)
- **2013 and 2014** ---- Fast Ship I and II
- **2008** ---- Test III
- **2015** ---- Jilin I and Lilac II (the 1st micro-sat independently developed and controlled by university students)
- **2017** ---- Lilac I (independently developed and controlled by university students)

HIT is the unique university who has independently developed 7 satellites in China.
Satellite Laser Communication

- In 2012, the 1st Chinese satellite-earth high speed laser communication test was successfully completed.
- In 2014, this achievement was awarded the First Prize of National Technology Invention.
- In 2015, together with the Heilongjiang provincial government, HIT established a company to realize the commercialization of these technology achievements.
HIT COLLABRATION WITH AEROSPACE INDUSTRY

Manned Space Engineering Project and Lunar Exploration Project

- The Ultra-large Space Environment Simulator
- The OUT Type Closed Turntable for Low Gravity Simulation
- The Spacecraft Data Management Fault Tolerant Computer
- Re-entry Capsule Welding Deformation Control Techniques
- The Expert Spacecraft Fault Diagnosis System
- Moving System of Moon Rover

HIT won the Outstanding Collaboration Award in Manned Space Engineering Project
HIT COLLABRATION WITH AEROSPACE INDUSTRY

Famous Alumni:

- So far, HIT has provided space industry with more than 25,000 graduates

Jinai Li
Enjie Luan
Jiadong Sun
Shixiang Hu
Xingrui Ma
Dazhe Xu
Zhaoyao Wang
Jiajun Yuan
Feng Li
Bonan Zhang
Baohua Yang
Zhisong Zhu

Office of Global Affairs 2017
ACHIEVEMENTS

Space Environment Simulation and Research Infrastructure (SESRI)

- Fills in the blank in national simulation facilities, comprehensive space environment interacting with the material science research platform in the integrated environment of large space.
- Granted national funding of 1.8 billion RMB (about 261.4 million USD) to construct 9 subsystems and their supporting infrastructure.
- Integrates and develops multi-disciplines and opens to the world.
HIT has signed academic cooperation agreements of friendship with 316 institutions of higher education in 35 countries.
STUDENT EXCHANGE

✓ In 2016, 2,305 HIT students were sent to study;
✓ HIT received 2,773 international students from 128 countries and regions in 2016.
Degree students: 1408
Non-degree students: 1365
Top 5 countries: Korea (895), Russia (566), Thailand (260), the United States (117), Mongolia (89).
The rate of Masters and PhDs is 67%.
International Student Programs

English-taught Programs

Bachelor
Civil Engineering
Chemical Science Engineering

Master
Management
Civil Engineering
Material Science
Mechanical Engineering
Electronics
Chemical Engineering

Doctor
All doctoral programs can be taught in English
Chinese Language Programs

To learn Chinese, go to China.
To learn Mandarin, go to Harbin.
To learn standard Mandarin, go to HIT!

Long-term:
✓ 20 language class hours per week
✓ 15 students in each class
✓ 9 levels in 3 organized classes (Elementary to advanced)
✓ Spring: March 1-June 20
  Fall: September 1-December 20

Short-term – Summer & Winter School:
✓ 80 language class hours in total
✓ All levels (Intensive oral Chinese training)
✓ Summer: July-August
✓ Winter: January-February
THANK YOU!

For more information, visit us on

http://en.hit.edu.cn/