

# BEI HANG UNIVERSITY

# AT A GLANCE



28,266

**TOTAL ENROLLMENT** 

27

**ACADEMIC SCHOOLS** 

15,298

UNDERGRADUATE STUDENTS

2.033

**FACULTY MEMBERS** 

12.968

**GRADUATE STUDENTS** 

578

**FULL PROFESSORS** 

200,000

815

ASSOCIATE PROFESSORS

# **HISTORY**

Beijing Institute of Aeronautics (BIA)

Founded with the merging of eight Chinese universities' aerospace departments

1988 Beijing University of Aeronautics and Astronautics (BUAA)

Set on the path towards a comprehensive university

Selected into the "211" National 1997 **Education Excellence Project** 

Facilitating the development of key disciplines

2001

Selected into the "985" National **Education Excellence Project** 

Aimed at building a world-class university

2002

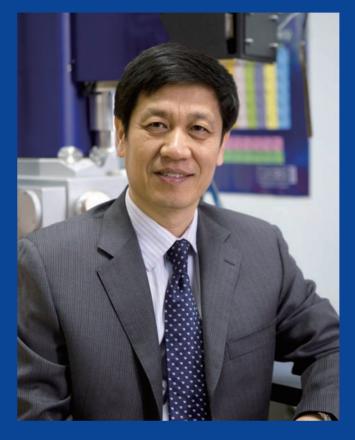
Beihang University (BUAA) Celebrating the 50th anniversary of Beihang

2013

Selected into the "2011" National Collaborative Innovation Project

Fostering capabilities in cutting-edge research and innovation

# MESSAGE FROM THE PRESIDENT



On behalf of the entire Beihang University family, I am pleased to introduce you to Beihang University, and to offer my vision for Beihang in the next decade.

In many ways, Beihang has been distinct from day one: starting with a select community of scholars and students delving into aerospace sciences, educating responsible professionals and leaders in engineering and other sectors, exerting a great influence on China's aerospace industry, and driving forward technological innovation of the country.

The history of Beihang is a proud narrative of response to the nation's call. In 1952, it was formed from the merger of the aerospace departments of eight Chinese universities. As one of China's first 16 key universities, Beihang has long been dedicated to cutting-edge research in the area of aerospace, contributing to the realization of the Chinese dream.

Today, the call emanates from a new century which has witnessed an explosion of knowledge and higher demand for original research and innovation in a global context. Supported by three national education excellence projects (211/985/2011), we have now developed into a comprehensive research university covering engineering, natural sciences, humanities and social sciences. In addition to serving the nation, we are striving to answer the new call by boosting engagement with the worldwide flow of talent, vigorous intellectual exchange, and international interdisciplinary research.

The University has the added attraction of being situated in Zhongguancun, also known as "China's Silicon Valley", within easy reach of central Beijing. At the heart of one of the most dynamic technology hubs in China, our main campus offers a thriving environment that encourages innovation and collaboration. The suburban Shahe campus provides quiet study milieu and is also home to the National Laboratory of Aeronautics and Astronautics (NLAA), well equipped with advanced research facilities.

We believe that great students make a great university possible. Beihang is deeply committed to an education that fosters innovation and intercultural awareness. It is a campus tradition that every year our students participate in innovation contests and figure out the most creative solutions in teams. It is also a booming trend for many students to spend weeks or a semester abroad studying at our partner universities.

Looking to the future, Beihang aspires to become a world class research university with distinctive advantages in science and technology. We hope you can join us along the way!

Welcome to Beihang.

President of Beihang University

# SCHOOLS AND ACADEMIC UNITS



### 1. SCHOOL OF MATERIALS SCIENCE AND ENGINEERING

- Dept. of Materials Science
- Dept. of Materials Physics and Chemistry
- Dept. of Materials Processing Engineering and Automation
- Dept. of Polymer and Composite Materials

### 2. SCHOOL OF ELECTRONIC AND INFORMATION ENGINEERING

- Dept. of Information and Communication Engineering
- Dept. of Electronic Science and Technology
- Dept. of Photonics and Information Engineering

# 3. SCHOOL OF AUTOMATION SCIENCE AND ELECTRICAL ENGINEERING

- Dept. of Automatic Control
- Dept. of Mechatronic Engineering
- Dept. of Electrical Engineering
- Dept. of Intelligent Systems and Control Engineering
- Dept. of Measurement and Automation Engineering

### 4. SCHOOL OF ENERGY AND POWER ENGINEERING

- Dept. of Aero Propulsion
- Dept. of Turbomachinery

- Dept. of Engineering Thermophysics
- Dept. of Thermo-Power Engineering

### 5. SCHOOL OF AERONAUTICAL SCIENCE AND ENGINEERING

- Dept. of Aircraft Design
- Dept. of Flight Mechanics and Flight Safety
- Dept. of Man-Machine-Environmental Engineering
- Dept. of Aerodynamics
- Dept. of Aircraft Structure and Strengths
- Dept. of Dynamics and Control
- Institute of Fluid Mechanics
- Institute of Solid Mechanics

# 6. SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

- Dept. of Computer Science and Technology
- Dept. of Computer Application Engineering
- Dept. of Information Security
- Institute of Software Engineering
- Institute of System Architecture
- Institute of Intelligent Information Processing
- Institute of Network and Digital Media
- Sino-German Joint Software Institute

# 7. SCHOOL OF MECHANICAL ENGINEERING AND AUTOMATION

- Dept. of Mechanical Design and Automation
- Dept. of Mechanical Manufacturing and Automation
- Dept. of Mechatronics Engineering and Automation
- Dept. of Industrial and Manufacturing System Engineering
- Dept. of Material Processing and Control Engineering
- Dept. of Aircraft Manufacturing Engineering
- Dept. of Industrial Design
- Institute of Robotics

#### 8. SCHOOL OF ECONOMICS AND MANAGEMENT

- Dept. of Behavioral and Operations Management
- Dept. of Information System
- Dept. of Management Science and Engineering
- Dept. of International Economics and Trade
- Dept. of Quantitative Economics and Business Statistics
- Dept. of Finance
- Dept. of Accounting
- Dept. of Digital Marketing
- Dept. of Leadership and Organization Management

### 9. SCHOOL OF MATHEMATICS AND SYSTEMS SCIENCE

- Dept. of Mathematics
- Dept. of Applied Mathematics
- Dept. of Information and Computational Science
- Dept. of Systems Science and Control

# 10. SCHOOL OF BIOLOGICAL SCIENCE AND MEDICAL ENGINEERING

- Dept. of Biomedical Engineering
- Dept. of Biological Science and Technology
- Dept. of Health and Rehabilitation Technology
- Institute of Human Factors Engineering
- Institute of Medical Instruments

# 11. SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

- Dept. of Administrative Management
- Dept. of Economics
- Dept. of Psychology
- Dept. of Chinese Language and Culture
- Institute of Higher Education
- Institute of Philosophy of Science and Technology
- Institute of Environmental Governance and Sustainability

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#### 12. SCHOOL OF FOREIGN LANGUAGES

- Dept. of Applied English
- Dept. of English Literature
- Dept. of German Studies
- Dept. of Linguistic Science and Engineering
- Dept. of Rhetoric and Communication
- Dept. of Russian Studies
- Dept. of Translation and Interpretation

### 13. SCHOOL OF TRANSPORTATION SCIENCE AND ENGINEERING

- Dept. of Aircraft Airworthiness Engineering
- Dept. of Automotive Engineering
- Dept. of Transportation Engineering
- Dept. of Civil and Airport Engineering

## 14. SCHOOL OF RELIABILITY AND SYSTEMS ENGINEERING

- Dept. of System Safety and Reliability Engineering
- Dept. of Project Systems Engineering

#### 15. SCHOOL OF ASTRONAUTICS

• Dept. of Spacecraft and Launch Vehicle Technology

- Dept. of Aerospace Propulsion
- Dept. of Guidance Navigation and Control
- Institute of Space Science

#### 16. FLIGHT COLLEGE (PILOT TRAINING)

### 17. SCHOOL OF INSTRUMENT SCIENCE AND OPTOELECTRONICS ENGINEERING

- Dept. of Measurement and Control
- Dept. of Inertia Technology and Navigation Instruments
- Dept. of Optical Engineering
- Dept. of Remote Sensing Science and Technology
- Institute of Optoelectronic Technology
- Institute of Small Satellites and Deep Space Exploration

### 18. SCHOOL OF PHYSICS AND NUCLEAR ENERGY ENGINEERING

- Dept. of Physics
- Dept. of Applied Physics
- Dept. of Nuclear Science and Technology

#### 19. SCHOOL OF LAW

- Center of Civil Law
- Center of Commercial and Economic Law
- Center of Constitutional Law and Administrative Law

- Center of Legal Theory and Legal History
- Center of Procedure Law
- Center of Criminal Law
- Center of International Law

#### 20. SCHOOL OF SOFTWARE ENGINEERING

- Department of Software Engineering
- Department of Embedded System
- Department of Integrated Circuit
- Department of Information Technology
- Department of Cloud Computing
- Department of SAP ERP
- Department of Network Security
- Department of Japanese Software

#### 21. SCHOOL OF ADVANCED ENGINEERING

#### 22. SINO-FRENCH ENGINEER SCHOOL

#### 23. SCHOOL OF NEW MEDIA ART AND DESIGN

- Dept. of Fine Arts
- Dept. of Visual Communication and Design
- Dept. of Digital Animation Art

#### 24. SCHOOL OF CHEMISTRY AND ENVIRONMENT

- Dept. of Chemistry and Chemical Engineering
- Dept. of Environmental Science and Engineering

#### 25. SCHOOL OF POLITICAL SCIENCE

26. SCHOOL OF ADVANCED STUDIES IN HUMANITIES AND SOCIAL SCIENCES

# EDUCATIONAL ADMINISTRATIVE SCHOOLS

#### 27. GRADUATE SCHOOL

#### 28. INTERNATIONAL SCHOOL

- Centre for Chinese Language Training
- APSCO Education and Training Center in China
- The UN Regional Center for Space Science and Technology Education in Asia and the Pacific (China)

#### 29. SCHOOL OF DISTANT LEARNING

#### 30. SCHOOL OF CONTINUING EDUCATION

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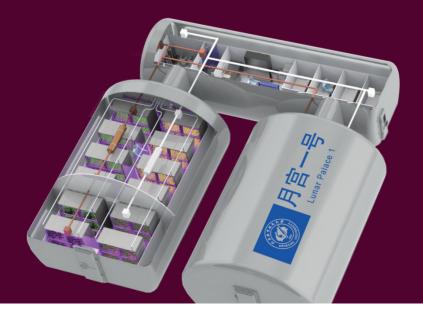
# SCIENTIFIC RESEARCH

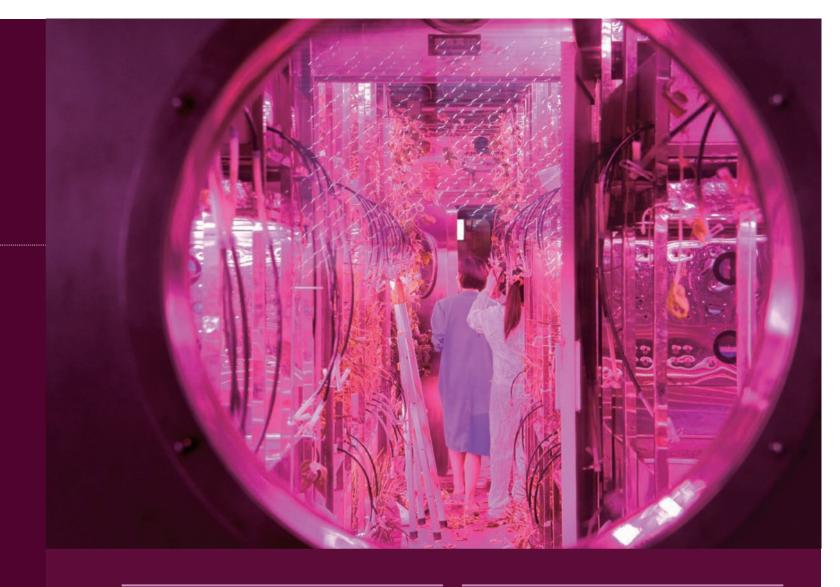
BEIHANG UNIVERSITY IS ONE OF THE TOP RESEARCH UNIVERSITIES IN CHINA IN TERMS OF SCIENTIFIC AND TECHNOLOGICAL INNOVATION ACHIEVEMENTS, FUNDING AND ACADEMIC STANDING.

The university stands at the forefront of research and innovation. Since its establishment in 1952, Beihang has received more than 1,264 awards for achievements at national or ministerial level in basic research and technological innovation and developments, and has had more than 40 projects ranked first in China. Such is the university's success in innovation that in recent years, Beihang has won 9 First Prizes of national science and technology awards, a truly outstanding achievement. Research funding at Beihang has been increasing at a rapid rate annually. In terms of the amount of external research funds. Beihang is ranked among the top universities in China.

Beihang also has strong links with industry, with more than 50% of its research projects originating from the industrial sector. With support from central and local governments, Beihang has established a number of cooperative innovation consortia with industry and research institutions in various sectors within China. These consortia contribute to innovation in research, technology transfer and social economic development.







- 1. NATIONAL LABORATORY
- National Laboratory of Aeronautics and Astronautics (NLAA)
- INTERDISCIPLINARY RESEARCH PLATFORM
- International Research Institute for Multidisciplinary Science (IRI)
- NATIONAL KEY LABORATORIES
- Aero-thermodynamics of Aero-engines
- Communications, Navigation and Surveillance Systems for Air Traffic Management
- Computational Fluid Dynamics
- Flight Vehicle Control Incorporation Technology
- Reliability and Environmental Engineering Technology
- Software Development Environment
- Virtual Reality Technology and Systems

- 4. NATIONAL ENGINEERING LABORATORIES AND RESEARCH CENTERS
- Additive Manufacturing for Large Metallic Components
- Advanced CNC Machining Technology
- Digital Television
- Satellite Navigation Applications
- Science and Technology Resources Sharing Service
- MINISTERIAL-LEVEL RESEARCH CENTRES AND LABORATORIES

#### MINISTRY OF EDUCATION

- Engineering Research Center of Advanced Air-Navigation & Air Traffic Management Technology
- Engineering Research Center of Laser Direct Manufacturing for Large Metallic Components
- Engineering Research Centre of Advanced Computer Application Technology



- Engineering Research Centre of Complicated Product Advanced Manufacturing
- Key Laboratory of Aerospace Materials and Performance
- Key Laboratory of Bio-inspired Intelligent Science and Technology
- Key Laboratory of Biomechanics and Mechanobiology
- Key Laboratory of Complex System Analysis and Managerial Decision Support
- Key Laboratory of Fluid Mechanics
- Key Laboratory of Mathematics, Informatics and Behavioral Semantics
- Key Laboratory of Micro-nano Measurement-Manipulation and Physics
- Key Laboratory of Precision Opto-mechatronics
- Key Laboratory of Spacecraft Design Optimization and Dynamic Simulation

#### BEIJING MUNICIPAL GOVERNMENT

- Engineering Research Center of High-Speed Magnetically Suspended Motor Technology and Application
- Key Laboratory for General Aviation Technology
- Key Laboratory for Network-based Cooperative Air Traffic Management
- Key Laboratory for Optimal Design, Test & Evaluation Technology of High-end Medical Implants and Interventional Instruments
- Key Laboratory of Advanced Computer Technology
- Key Laboratory of Bioinspired Energy Materials and Devices
- Key Laboratory of Clean Energy and High Efficiency Power Engineering

- Key Laboratory of Cooperative Vehicle Infrastructure Systems and Safety Control
- Key Laboratory of Digital Design and Manufacturing
- Key Laboratory of Digital Media
- Key Laboratory of Emergency Support Simulation Technologies for City Operations
- Key Laboratory of Network Technology
- Key Laboratory of Polymer Matrix Composites
- Key Laboratory of Powder Technology
- Key Laboratory of Safety of Integrated Aircraft and Propulsion Systems
- Key Laboratory of Special Functional Materials and Thin Film Technology

#### **OTHERS**

- Analysis & Appraisal Laboratory of Civil Aviation Safety, Civil Aviation Administration of China
- Aviation Laboratory of Reliability and Environment
- Beihang EMC Technology Laboratory
- Beihang Software Testing and Evaluation Laboratory
- Key Laboratory of Advanced Simulation Technology and Aviation Science and Technology
- Key Laboratory of Avionics
- Key Laboratory of Rehabilitation Technical Aids, Ministry of Civil Affairs
- Mechanical Industrial Engineering Laboratory of CNC Machining Process Technology and Equipment



# NATIONAL LABORATORY OF AERONAUTICS AND ASTRONAUTICS

# INTERNATIONAL RESEARCH INSTITUTE FOR MULTIDISCIPLINARY SCIENCE

POSITIONED AS A GLOBALLY-ORIENTED RESEARCH PLATFORM, THE NLAA EPITOMISES CHINA'S DETERMINATION TO UNDERTAKE WORLD-CLASS AEROSPACE RESEARCH AND CONSTANTLY INNOVATE IN THIS VITAL FIELD.



The mission of the National Laboratory of Aeronautics and Astronautics (NLAA) is to enhance the overall competiveness and innovativeness of China's aerospace science and technology. Set up on our suburban campus at the end of 2006, the NLAA is growing into a national research institution for aerospace research and innovation in China, also encompassing other functions of strategic counselling, top-down planning and technology management in aerospace.

By building first-rate facilities and attracting worldclass scientists, the NLAA aims to lead the nation

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in fundamental, strategic, forward-looking and comprehensive research on aerospace, respond with quality and excellence to scientific issues of national importance, and propel the future development of the aerospace industry.

Currently, the NLAA has established a national think tank for aerospace strategies and is strengthening its planning for fundamental and high-tech research. With flexible mechanism and openness to global talents, the NLAA strives to make itself the premier destination for the very best scientists and engineers in China and around the world.

AT THE IRI, SCIENCE KNOWS NO BORDERS OR BOUNDARIES. IN THIS AGE OF "BIG SCIENCE", THE IRI PURSUES WORLD-CLASS STANDARDS OF EXCELLENCE IN FUNDAMENTAL, MULTIDISCIPLINARY AND FRONTIER RESEARCH BY BRINGING TOGETHER HIGHLY-TALENTED INDIVIDUALS FROM RIGHT ACROSS THE GLOBE.

Established in 2012, the International Research Institute for Multidisciplinary Science (IRI) of Beihang University pursues world-class excellence in fundamental, multidisciplinary and frontier research in this age of "Big Science". Breaking through the traditional barriers among disciplines, the IRI takes five scientific fields as its current strategic foci: Advanced Information Science & Technology, Advanced Materials & Micro/Nanofabrication, Aerospace Mechanics, Life Science & Modern Medicine, and New Energy & Environmental Science.

Currently, the IRI owns 11 research centres operating under 11 Principal Investigators and engaging some 100 distinguished researchers from around the world, including Prof. Albert Fert (winner of the 2007 Nobel Prize in Physics) and Prof. Alan J. Heeger (winner of the 2000 Nobel Prize in Chemistry). Through a vigorous global recruitment program, the IRI is building a team of 500 top scientists from all over the world.

The IRI creates a highly internationalized working environment and research conditions. Furthermore, it implements an innovative mechanism that values academic autonomy and incorporates international appraisal, performance motivation, interdisciplinary interactions and engagement of young researchers.

#### THE IRI'S FIVE STRATEGIC SCIENTIFIC FIELDS

- Advanced Information Science & Technology
- Advanced Materials & Micro/Nanofabrication
- Aerospace Mechanics
- Life Science & Modern Medicine
- New Energy & Environmental Science

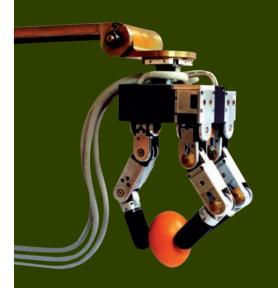
### RESEARCH CENTRES AND PRINCIPAL INVESTIGATORS

- Biological & Nature-Inspired Materials
   Prof. Robert O. Ritchie
- Big Data Prof. Fan Wenfei
- Clean Energy Systems and Materials
   Prof. John W. Holmes
- Implanting & Interventional Medical Device – Prof. Cheng-Kung Cheng
- Nuclei and Particles Prof. Isao Tanihata
- Soft Matter Physics & Applications Prof. Masao Doi
- Spintronics Dr. Weisheng Zhao
- HEEGER Beijing Research and Development Center – Prof. Alan J.Heeger
- Magnetism & Magnetic Materials Prof. JMD Coey
- Integrated Computational Materials Engineering – Prof. Zhimei Sun
- Space Environment Science and Technology
   Prof. Malcolm Wray Dunlop

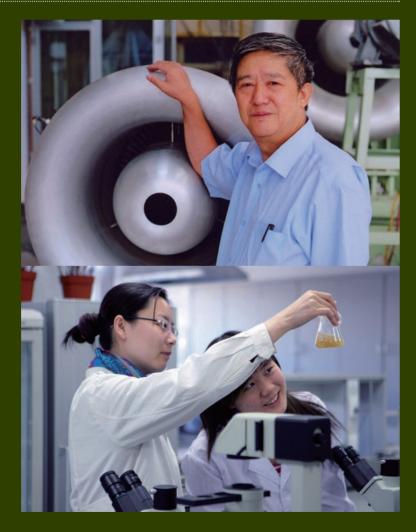
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# FACULTY AND STAFF

AS A RESEARCH UNIVERSITY, BEIHANG HAS A FACULTY THAT IS RESEARCH-FOCUSED WITH FACULTY MEMBERS WHO ARE PASSIONATE ABOUT DELIVERING HIGH QUALITY EDUCATION THAT FOSTERS INNOVATION AND CREATIVITY.



Beihang University currently has 3,814 faculty and staff members, including 2,033 full-time faculty members. Among them are 20 members of the Chinese Academy of Sciences and the Chinese Academy of Engineering and over 570 full professors. In recent years, Beihang has concentrated on building up a truly international faculty body and has attracted a significant number of top international academics and scientists to work as fulltime or visiting professors of the university.

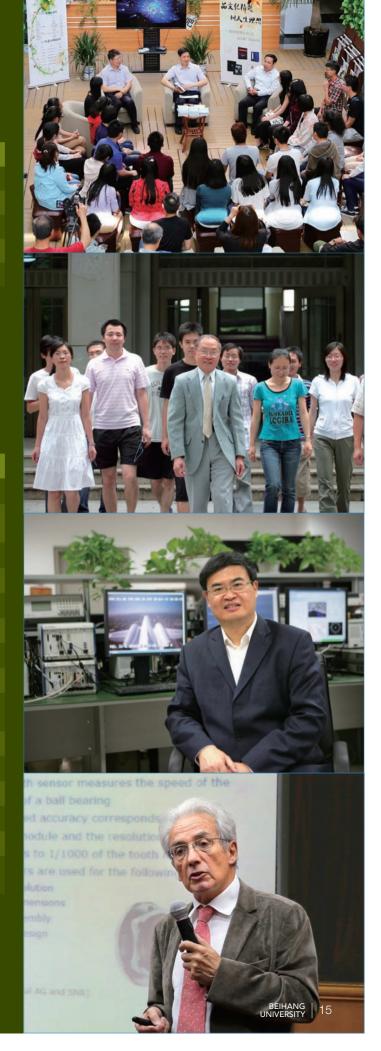


# ACADEMICIANS OF CHINESE ACADEMY OF SCIENCES

NAME	MAJOR RESEARCH FIELD
GAO Zhentong	Structural Fatigue and Reliability
HUAI Jinpeng	Computer Software
JIANG Lei	Inorganic Chemistry
LI Tian	Airplane Aerodynamics
LI Wei	Computer Software and Theory

# **ACADEMICIANS OF** CHINESE ACADEMY OF ENGINEERING

NAME	MAJOR RESEARCH FIELD
CHEN Maozhang	Turbomachine
DU Shanyi	Flight Vehicle Structure Mechanics and Composite Material
FENG Peide	Inertia Technology
LI Bohu	System Simulation
LI Chunxuan	Aerodynamics and Flying Vehicle Design
LIU Daxiang	Aero-engine Design
QI Faren	Satellite and Spacecraft design
WANG Jun	Environmental Simulation Technology
XU Huibin	Thermal Barrier Coatings and Giant Magnetostrictive Materials
YAO Junen	Electron Microscope
ZHANG Guangjun	Precision Opto-electronics Measurement
ZHANG Jun	Air Traffic Management
ZHANG Yanzhong	Signal Processing
ZHAO Qinping	Virtual Reality Technology
ZHONG Qunpeng	Failure Analysis, Prognostication



# DEGREE PROGRAMS

## WELL-KNOWN FOR ITS ACADEMIC EXCELLENCE AND WIDE RANGE OF DEGREE PROGRAMS, BEIHANG ATTRACTS THE FINEST STUDENTS FROM ALL OVER THE WORLD.

Through its 27 schools, Beihang offers a wide range of degree programs which cover sciences, engineering, economics, management, humanities, law, philosophy, education, medicine and art. Currently, Beihang offers 52 doctoral programs, 76 master programs

and 61 bachelor programs. 28 of our doctoral programs (asterisked below) are ranked as National Key Disciplines, the highest national recognition of excellence in both teaching and research.

# **DOCTORAL** PROGRAMS

- 1. Administrative Management (inclu. 5 specific programs)
- 2. Aeronautical and Astronautical Propulsion \*
- 3. Biomedical Engineering
- 4. Chemical Process Equipment
- 5. Communications and Information Systems \*
- 6. Computer Application Technology \*
- 7. Computer Software and Theory \*
- 8. Computer Systems Architecture \*
- 9. Condensed Matter Physics
- 10. Control Theory and Engineering \*
- 11. Educational Economy and Administration

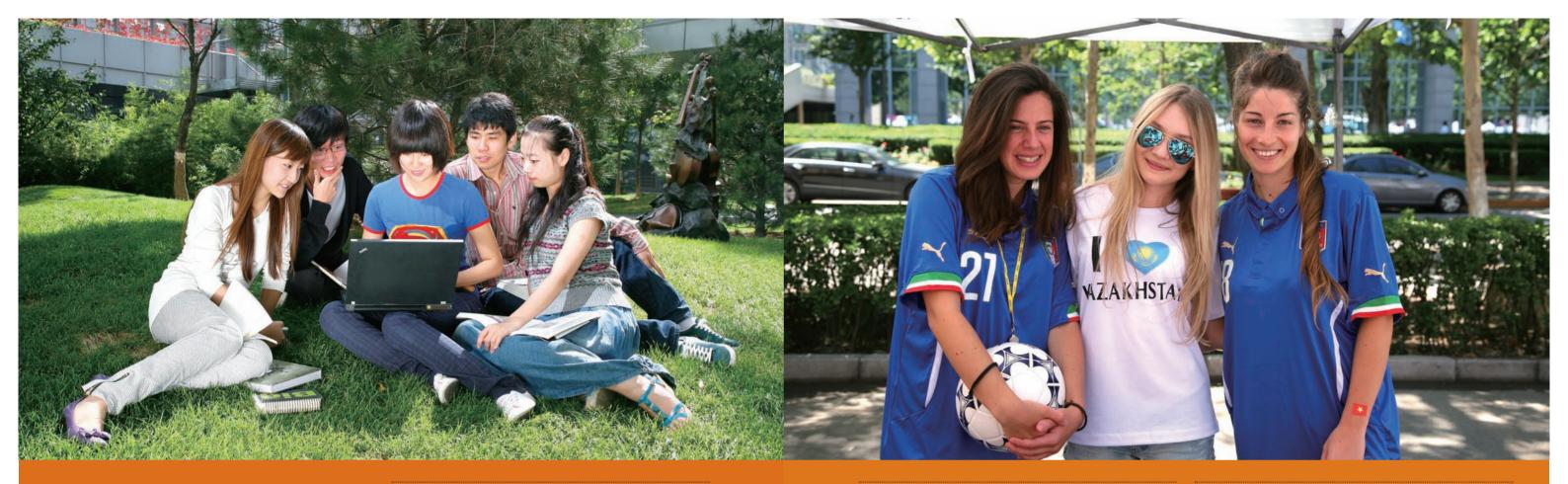
- 12. Electric Circuits and System
- 13. Electromagnetic Fields and Microwave Technology \*
- 14. Engineering Mechanics \*
- 15. Engineering Thermo-Physics
- 16. Flight Vehicle Design \*
- 17. Fluid Machinery and Engineering
- 18. Fluid Mechanics \*
- 19. Foreign Language and Literature (inclu. 11 programs)
- 20. General Mechanics and Fundamentals in Mechanics \*
- 21. Highway and Railway Engineering
- 22. Law (inclu. 10 programs)
- 23. Management Science and Engineering \*
- 24. Man-Machine and Environment Engineering \*
- 25. Manufacture Engineering of Aeronautics and Astronautics \*



- 26. Manufacturing Engineering and Automation \*
- 27. Materials Physics and Chemistry \*
- 28. Materials Processing Engineering \*
- 29. Materials Science \*
- 30. Mathematics (inclu. 8 programs)
- 31. Measurement and Testing Technologies and Instruments \*
- 32. Measurement Technologies and Automatic-Device \*
- 33. Mechanical Design and Theory \*
- 34. Mechanical-Electronic Engineering \*
- 35. Microelectronics and Solid State Electronics
- 36. Navigation, Guidance and Control \*
- 37. Optical Engineering \*
- 38. Pattern Recognition and Intelligent System \*

- 39. Physical Electronics
- 40. Power Machinery and Engineering
- 41. Precision Instruments and Machinery \*
- 42. Refrigeration and Cryogenic Engineering
- 43. Signals and Information Processing
- 44. Software Engineering
- 45. Solid Mechanics \*
- 46. Statistics
- 47. Systems Engineering \*
- 48. Thermal Power Engineering
- 49. Traffic Information Engineering and Control
- 50. Transportation Plan and Management
- 51. Vehicle Engineering \*
- 52. Vehicle Operation Engineering

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# **MASTER'S DEGREE PROGRAMS**

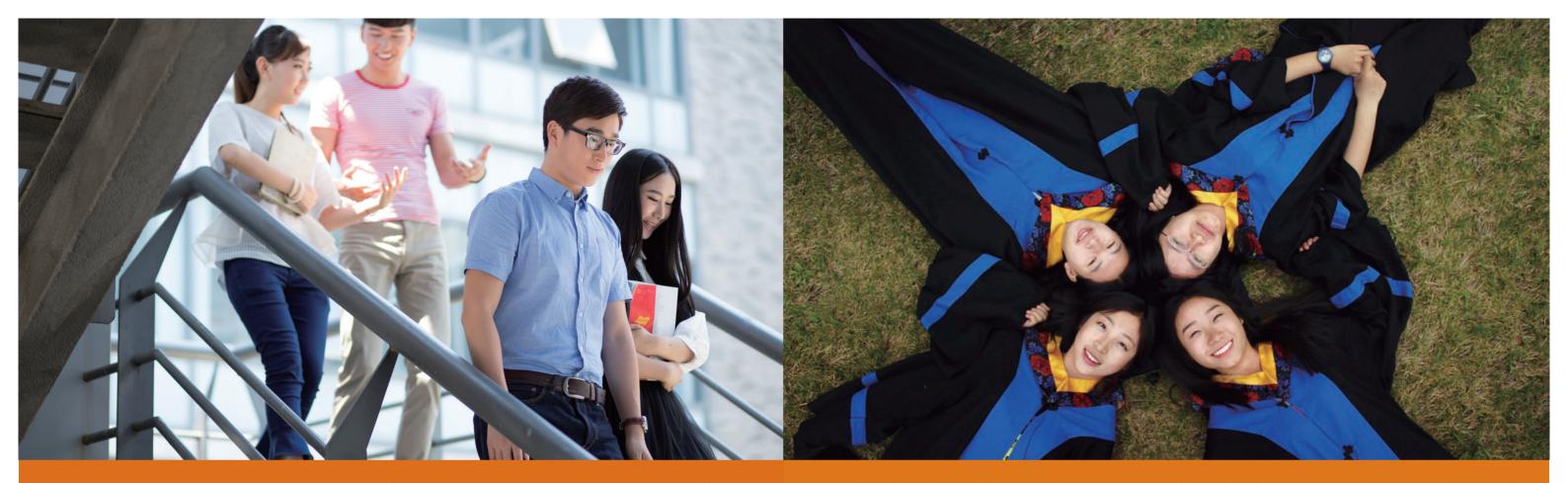
- 1. Administrative Management
- Aeronautical and Astronautical Propulsion
- 3. Application Engineering of Transportation Vehicles
- **Applied Chemistry**
- 5. Applied Mathematics
- 6. Biomedical Engineering
- Chemical Process Equipment
- Civil and Commercial Law
- 9. Communications and Information Systems
- 10. Computer Application Technology
- 11. Computer Software and Theory
- 12. Computer Systems Architecture
- 13. Condensed Matter Physics
- 14. Control Theory and Engineering
- 15. Design
- 16. Design and Construction of Naval Architecture and Ocean Structure

- 17. Earth Physics
- 18. Education Technology
- 19. Educational Economy and Administration
- 20. Electric Circuits and Systems
- 21. Electrical Machinery and Apparatus
- 22. Electromagnetic Fields and Microwave Technology
- 23. Engineering Mechanics
- 24. Engineering Thermo-physics
- 25. English Language and Literature
- 26. Enterprise Management
- 27. Environmental Engineering
- 28. Finance and Banking
- 29. Flight Vehicle Design
- 30. Fluid Machinery and Engineering
- 31. Fluid Mechanics
- 32. Fundamental Mathematics
- 33. General Mechanics and Fundamentals in Mechanics
- 34. Geotechnical Engineering
- 35. Higher Education
- 36. Highway and Railway Engineering
- 37. International Trade

- 38. Linguistics and Applied Linguistics for Foreign Language
- 39. Machine Building and Automation
- 40. Management Science and Engineering
- 41. Man-Machine and Environment Engineering
- 42. Manufacture Engineering of Aeronautics and Astronautics
- 43. Mapping Science and Technology
- 44. Materials Processing Engineering
- 45. Materials Science
- 46. Measurement Technology and Automatic Device
- 47. Measuring Technology and Instrumentation
- 48. Mechanical Design and Theory
- 49. Mechanical-Electronic Engineering
- 50. Microelectronics and Solid State Electronics
- 51. National Economics
- 52. Navigation, Guidance and Control
- 53. Optics
- 54. Optics Engineering
- 55. Pattern Recognition and Intelligent System
- 56. Physical Electronics

- 57. Physics and Chemistry of Materials
- 58. Polymer Chemistry and Physics
- 59. Power Electronics and Electrical Driving
- 60. Power Machinery and Engineering
- 61. Precision Instruments and Machinery
- 62. Refrigeration and Cryogenic Engineering
- 63. Signals and Information Processing
- 64. Software Engineering
- 65. Solid Mechanics
- 66. Special Medicine
- 67. Statistics
- 68. Structure Engineering
- 69. Systems Engineering
- 70. Technical Economics and Management
- 71. Theoretical Physics
- 72. Thermal Power Engineering
- 73. Transportation Information Engineering and Control
- 74. Transportation Plan and Management
- 75. Underwater Acoustics
- 76. Vehicle Engineering

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# UNDERGRADUATE PROGRAMS

- 1. Accounting
- 2. Administrative Management
- 3. Aircraft Airworthiness Technology
- 4. Applied Chemistry
- 5. Applied Physics
- 6. Artistic Design
- 7. Automation
- 8. Biomedical Engineering
- 9. Biotechnology Engineering
- 10. Business Management
- 11. Chemistry
- 12. Chinese Language
- 13. Civil Engineering
- 14. Communications Engineering

- 15. Computer Science and Technology
- 16. Detection, Guidance and Control Technology
- 17. Economics
- 18. Electrical Engineering and Automation
- 19. Electromagnetic Field and Wireless Technology
- 20. Electronic Information Engineering
- 21. Electronic Science and Technology
- 22. Energy and Power Engineering
- 23. Engineering Mechanics
- 24. English
- 25. Environmental Engineering
- 26. Finance
- 27. Fine Art
- 28. Flight Technology
- 29. Flight Vehicle Design and Engineering
- 30. Flight Vehicle Environment and Life Support Engineering

- 31. Flight Vehicle Manufacturing Engineering
- 32. Flight Vehicle Propulsion Engineering
- 33. German
- 34. Industrial Design
- 35. Industrial Engineering
- 36. Information and Computing Science
- 37. Information Confrontation Technology
- 38. Information Engineering
- 39. Information Management and Information Systems
- 40. Information Security
- 41. Integration Circuits Design and Integration Systems
- 42. International Economy and Trade
- 43. Law
- 44. Logistics Management
- 45. Materials Science and Engineering
- 46. Mathematics and Applied Mathematics

- 47. Mechanical Engineering and Automation
- 48. Micro-electro-mechanical System Engineering
- 49. Nanomaterial Science and Nanotechnology
- 50. Nuclear Physics
- 51. Photoelectric Information Engineering
- 52. Psychology
- 53. Quality and Reliability Engineering
- 54. Remote Sensing Science and Technology
- 55. Safety Engineering
- 56. Software Engineering
- 57. Statistics
- 58. Testing and Measurement Technology and Instrumentation
- 59. Translation
- 60. Transportation
- 61. Vehicle Engineering

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# CAMPUS LIFE

BEIHANG UNIVERSITY IS DEDICATED TO PROVIDING ITS EDUCATION PROGRAMS IN AN ACCESSIBLE AND SUPPORTIVE ENVIRONMENT WHICH IS INTELLECTUALLY AND CULTURALLY DYNAMIC.



The facilities at Beihang - which are some of the nation's finest - assist us in providing a study and living environment that inspires our students to reach ever higher levels of achievement. The Beihang Library, which can seat at least 4000 people, is one of China's top university libraries. The university is also home to amenities as diverse as the Beihang Art Gallery, the Sunrise Concert Hall, the Air & Space Museum and the Science and Technology

Innovation Centre. As well as all this, the university also has state-of-the-art sports facilities. These include a modern gymnasium, which has proven itself a first-class venue for international competition, as well as an indoor swimming pool, indoor tennis courts and various grounds for outdoor sports.

Beihang is well-known for the large number of lively and vigorous student activities it offers, not only in science and technology but also in sports

and arts. The University's broad campus culture includes competitions such as the "Feng Ru Cup" for extracurricular inventions in science and technology, intellectual events such as the "Beihang Lectures" (which is a forum for Beihang students to interact with great minds) as well as the Festival of Culture and Arts and the Festival of Sports.

The Student Art Ensemble - which comprises a dance troupe, a chorus, a chamber music group and a Chinese folk music band - is noted for its

high artistic standards. In addition to promoting the artistic side of campus life, the ensemble has represented the University in various contests and has received remarkable honors. The volleyball team, famous for its excellent performance, has won championships in all China's college volleyball competitions on many occasions. This diverse range of scientific, technological and cultural extracurricular activities provides students with ample opportunities for involvement in cultural and creative pursuits.

# GLOBAL BEIHANG

IN ITS DEVELOPMENT AGENDA, BEIHANG UNIVERSITY HAS LONG MADE GLOBAL NETWORKING A PRIORITY. BEIHANG HAS DEVELOPED THE UPS GLOBAL ENGAGEMENT PLAN, WHICH AIMS TO ENCOURAGE COOPERATION GLOBALLY AT THREE LEVELS: UNIVERSITY TO UNIVERSITY, PROFESSOR TO PROFESSOR AND STUDENT TO STUDENT.

The university develops partnerships with universities, research institutions and companies in various parts of the world. These partnerships cover faculty exchanges, student mobility, workshops and conferences, joint degree programs/courses, and joint publications. Beihang has also established a number of truly ambitious international educational projects. A prime example is the Beihang Sino-French Engineer School (also known as Ecole Centrale de Pekin). This highly successful joint project established by Beihang and the Groupe des Ecoles Centrales in 2005 has established international recognition for its excellence.

Beihang welcomes guest professors from all over the world with open arms, whether they come to work at Beihang or simply to visit. Every year the university draws more than 1,000 visiting professors and experts to participate in teaching and research programs at Beihang or to attend academic conferences held by the university. At the same time, over 3,500 Beihang faculty members and students visit partner institutions to give lectures, participate in external academic conferences, engage in cooperative scientific research or go on exchange.

Beihang launched its education programs for international students in 1993. Over the past decades, Beihang has become a leading university in China for providing degree programs in engineering as well as Chinese Language training.



# GLOBAL PARTNERSHIPS

So far, Beihang has developed active partnership with over 180 universities, research institutions and companies in 32 countries and areas. The University is also member of several global consortia, including Top Industrial Managers for Europe (T.I.M.E), Sino-Spanish University Consortium, and China-CEECs Higher Education Institutions Consortium.

On a selective basis, Beihang pursues to establish strategic relationships or joint education and research centres with institutions where there is a mutual interest in all-around collaboration. These collaborations are envisioned as bringing a number of benefits to both parties, covering student exchanges, joint research, mutual support in outreach activities, and much more. In March 2014, Beihang signed a Priviledge Partnership agreement with Université libre de Bruxelles (ULB). The signing ceremony took place in the Egmont Palace in Brussels and was witnessed by Chinese President XI Jinping and former Prime Minister of Belgium Elio Di Rupo.

In the meantime, Beihang inauguatated its brand-new Europe Office at ULB's Campus du Solbosch. The office is expected to consolidate and expand our partner network in Europe, promote collaborative innovation in science and technology, attract top research talent and students, and build the alumni network.

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#### **JOINT CENTRES AND LABORATORIES**

- Air Transportation Management Joint Laboratory
- Beihang-EPFL Space Technology Initiative
- Beihang-KTH Centre for Wireless Communications
- Beihang-KTH Joint Laboratory for Solar Energy Technology and Engineering
- Beihang-Motorola/Freescale Education Laboratory
- Beihang-Purdue Joint Laboratory of Low-Emissions Combustion Science and Technology
- Beihang-Purdue Joint Laboratory on Energy Systems

- Beihang-SMC Research Centre
- Beihang-TI DSP Education Laboratory
- Beihang-ULB Education and Research Centre
- Beihang-UPM Education and Research Centre
- Complexity Data Analysis Research Centre
- Ericsson Mobile Cloud Computing Laboratory
- Fert Beijing Institute
- International Joint Research Centre of Advanced Life Support Technology

- International Research Centre for Complex Systems and Scientific-Engineering Computing
- ITI-Beihang Training Centre
- Joint Laboratory of Advanced Machining Technology in Aerospace Industry
- Sino-Canadian Joint Centre for Social Sciences
- Sino-French Laboratory for Sciences and Engineering
- Sino-German Joint Software Institute
- Sino-Japan New Materials Research Centre
- Sino-UK Joint Laboratory on Space Science and Technology

#### **JOINT SCHOOLS**

- Beihang Sino-French Engineer School (ECPKN)
   —Joint School with the Groupe des Écoles Centrale, France
- Confucius Institute at Kogakuin University, Japan

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# BEIHANG GLOBAL CAMPUS

The concept of "Beihang Global Campus" was born out of a wish to bring to our students a rich variety of study opportunities the globalized world has to offer. It incoporates events and programs both at home and abroad, including student exchange, double degree programs, and short-term/summer porgrams. By promoting distributed learning regardless of time or geographical boundaries, we aim to educate global citizens with a broader worldview, intercultural awareness, and new insights into academic disciplines and cultures.

Beihang has established over 120 exchange and double degree programs with partner institutions

around the world. Among our exchange programs, over 50 of them are supported by the China Scholarship Council (CSC), benefiting a total of over 200 undergraduates at Beihang every year. Our Ph.D students enjoy a broad range of opportunities to study and research overseas for a minimum length of three months, many of whom are also supported by the CSC.

Beihang University anually receives over 500 students from all over the world to participate in our international summer programs. The flagship programs include Beihang University Air & Space Summer Camp, Beihang International Undergraduate Summer School (ISS), International Graduate Summer School in Aeronautics and Astronautics (IGSS), International Collegiate Design and Innovation Competition (ICDIC), and "Fengru Cup" Innovation Competition, etc...

#### INTERNATIONAL STUDENTS

As the first university in China to offer postgraduate programs in English for international students, Beihang has over 250 courses taught in the English language by some of China's most published faculty and international professors. Each year, more than 1,700 international students from 90 countries study at Beihang, of whom over 60 percent are degree-seeking students and the rest are taking part in exchange programs or learning Chinese here.

Beihang is home to the U.N. Regional Center for Space Science and Technology Education in Asia and the Pacific (China), the first UN organization in China dedicated to space education. Launched in November 2014, this center is jointly run by the United Nations Office for Outer Space Affairs (UNOOSA) and Beihang University. It aims to improve the space science and technology education in developing countries.

#### SCHOLARSHIPS FOR INTERNATIONAL STUDENTS

- Chinese Government Scholarship (CGS)
- Cultural and Educational Exchange Scholarship for American Students
- Beihang International Student Scholarship
- Beijing Municipal Government Scholarship
- Postgraduate Program in Universities Under CGS
- Scholarship from Enterprises

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#### GLOBAL EXCHANGE / DOUBLE DEGREE PARTNERS

- Exchange Program
- ★ Double Degree Program



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#### **INTERNATIONAL DIVISION**

Tel.: 86 10 8233 8051
Fax: 86 10 8232 8036
Email: fao@buaa.edu.cn
Web: id.buaa.edu.cn

#### **INTERNATIONAL SCHOOL**

Tel.: 86 10 8233 9458
Fax: 86 10 8231 6488
Email: fso@buaa.edu.cn
Web: is.buaa.edu.cn