

Undergraduate Students: **14,400**

Postgraduate Students: **14,200**

Undergraduate Programs: **62**

Doctoral Programs: **67**

Key Figures

Master's Programs: **117**

Faculty Members: **3,500**

Academicians of Chinese
Academy of Science and Chinese
Academy of Engineering:

19

Campuses: **Youyi Campus and Chang'an Campus**

National Laboratories: **7**



Chinese Scholarship Council

Ph.D. Program: **804**

students (2007-2013)

Campuses: **340** hectares

Research Fund: **2 billion** RMB (2012)

Chinese Scholarship Council
Undergraduate Program:

112 students (2012-2013)

International Students: **774** (2013)

Undergraduate Employment Rate: **96%**

Postgraduate Employment Rate: **98%**

Welcome from the President



As Confucius says, how happy we are, to meet friends from afar. It is my pleasure to welcome and invite you, on behalf of Northwestern Polytechnical University (NPU), to explore the breadth and depth of our university.

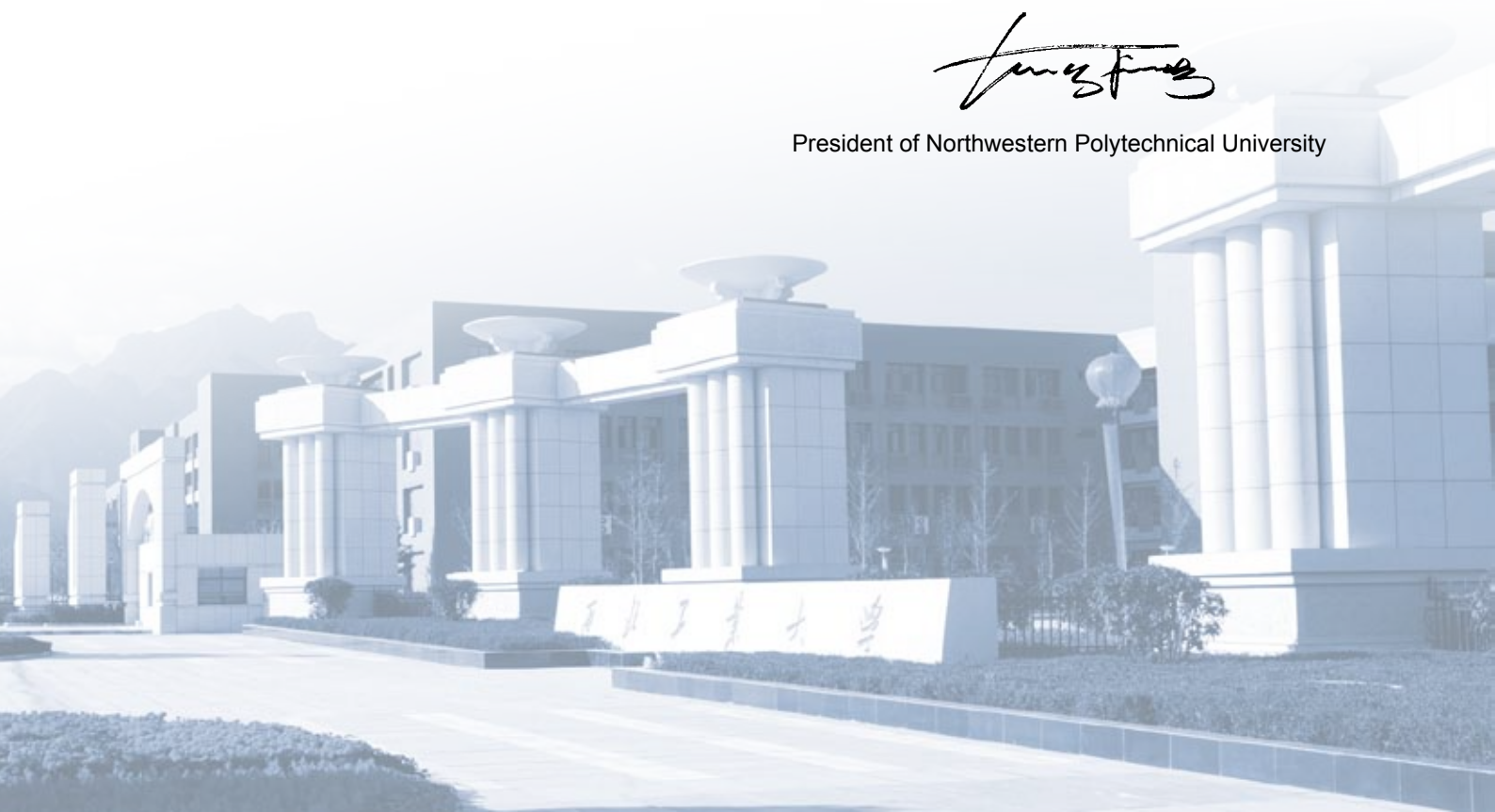
NPU is located in Xi'an, the origin of Chinese civilization and the imperial capital for thirteen dynasties in Chinese history. The University has two beautiful campuses covering at total of 840 acres, with one situated right beside the starting point of the ancient Silk Road and the other surrounded by the natural scenery of the Qin Mountains.

NPU was founded in 1938, and has developed into a research-led, multi-disciplinary, and international university of science and technology, with strengths in aeronautics, astronautics and marine technology. The University has graduated more than 150,000 students, and has a vibrant alumni community stretching across the globe.

A good friend afar brings a distant land near. NPU is open for cooperation and exchange with universities around the world, and I look forward to working with our friends at home and abroad to create a bright future for all.

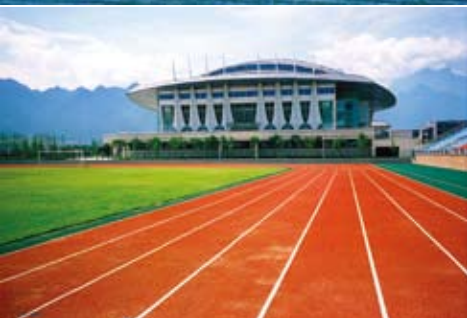
A stylized, handwritten signature in black ink, likely belonging to the President of Northwestern Polytechnical University.

President of Northwestern Polytechnical University





Contents



- 1 Global Partners
- 3 School of Aeronautics
- 5 School of Astronautics
- 7 School of Marine Science and Technology
- 9 School of Materials Science and Engineering
- 11 School of Mechanical Engineering
- 13 School of Mechanics, Civil Engineering & Architecture
- 15 School of Engine and Energy
- 17 School of Electronics and Information
- 19 School of Automation
- 21 School of Computer Science and Engineering
- 23 School of Sciences
- 25 School of Management
- 27 School of Humanities, Economics, and Law
- 29 School of Software Engineering
- 31 School of Life Sciences
- 33 School of Foreign Languages
- 35 International College

Global Partners

USA

Duke University
Harvard University
New Mexico State University
Northwestern University
Old Dominion University
Pennsylvania State University
State University of New York, Stony
Texas A-M University
University of California, Berkeley
University of California, Irvine
University of Maryland
University of Colorado, Denver
University of Missouri-Columbia
University of Nebraska-Lincoln
University of North Carolina, Charlotte
University of Rochester
Whitman College
Yale University

Canada

University of Alberta
University of Ryerson
University of Saskatchewan
University of Victoria

Britain

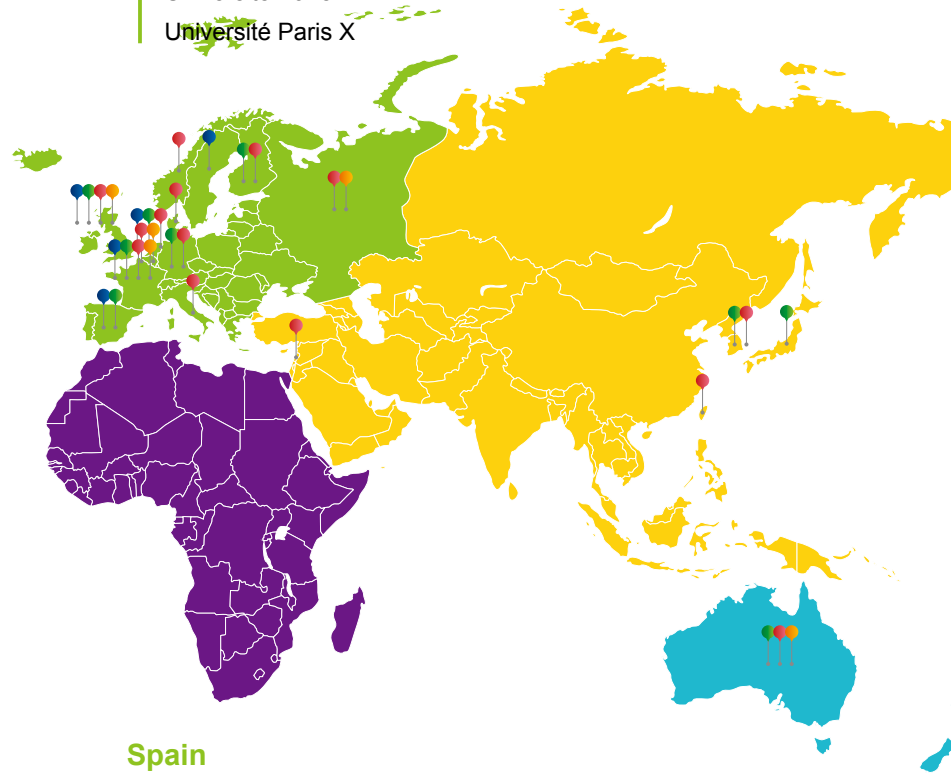
Aberystwyth University
Imperial College London
Loughborough University
Queen Mary University of London
University of East Anglia
University of Exeter
University of Glasgow
University of Hull
University of Leeds
University of Leicester
University of Manchester
University of Oxford
University of Sheffield
University of Southampton
University of Strathclyde
University of Warwick

Germany

German Aerospace Center
Rwth Aachen University
Technical University Braunschweig
Technical University of Berlin
Technical University of Hamburg-Harburg

France

École Polytechnique de L'université de Nantes
ESSCA School of Management
Institute National des Sciences Appliquées de Lyon
TELECOM Ecole de Management
Université de Poitiers
Université de Technologie de Belfort-Montbéliard
Université de Technologie de Compiègne
Université de Technologie de Troyes
Université D'evry Val D'essonne
Université Paris VI
Université Paris X



Spain

Universidad Politécnica de Madrid
Universidad Politecnica de Valencia

The Netherlands

Delft University of Technology
Inholland University of Applied Sciences
University of Twente

Finland

Aalto University
University of Vaasa

Belgium

University of Liege
Vrije Universiteit Brussel

Italy

Milan Institute of Technology

Sweden

Lund University
Royal Institute of Technology

Hungary

University of Pécs

Norway

Norwegian University of
Science and Technology

Denmark

University of Southern Denmark

Russia

Kazan National Research Technical University
Moscow Power Engineering Institute
Samara State Aerospace University
State Marine Technical University of St. Petersburg
State University of Aerospace Technologies
The Moscow State Technical University of Civil Aviation

Australia

Curtin University of Technology
The University of Adelaide
The University of Melbourne
The University of New South Wales
University of Sydney

Palestine

Ai Istiqlal University
Ai-Quds Open Universith
Engineering Sciences and Technology
Gulam Ishaq Khan Institute of

Japan

Tokyo University of Science

South Korea

Chung - Ang University
Hanyang University
Paichai University
Sung Kyun Kwan University
Yeungnam University

Taiwan Region

Chung Cheng University
Chung Hsing University
Chung Yuan Christian University
Feng Chia University
Fu Jen Catholic University
I-Shou University
Kun Shan University
Providence University
Shih Hsih University
Sun Yat-Sen University
Taiwan Normal University
Taiwan University
Taiwan University of Science and Technology
Taipei University of TechnoLogY
Tamkang University
Tunghai University
Yuan Ze University

- CSC PhD Program
- CSC Undergraduate Program
- University Program
- Joint Research Institution

School of Aeronautics

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About the School

The predecessors of the School of Aeronautics were the Aircraft Engineering Department and the Civil Aviation Engineering College. The Aircraft Engineering Department was found in 1952 by merging three Aeronautics Departments of Shanghai Jiaotong University, Nanjing University and Zhejiang University. The next big expansion of the department occurred in 1970 when the Air Force Engineering Department of Harbin Military Engineering Institute was absorbed into the department. With the approval of the AVIC (Aviation Industries of China) and CAAC (Civil Aviation Administration of China), the Civil Aviation Engineering College was jointly founded by NPU, AMECO (Aircraft Maintenance & Engineering Corporation) and CNWA (China Northwest Airline) in 1994. Another major development was the Aircraft Engineering Department's merger with the Civil Aviation Engineering College in 2003. As a result of these activities the school could hardly be better situated for the research and study for aeronautics. With its location in Xi'an, the school is in a unique position to combine the best aeronautical industries in Xi'an.

Faculty and Students

Faculty: 176

Academicians: 3

Undergraduates: over 1300

Master Students: over 600

Ph.D. Students: over 300

Departments

Department of Aircraft Design Engineering

Department of Integrated Technology and Control Engineering

Department of Fluid Mechanics

Department of Aeronautical Structural Engineering

Department of Civil Aviation Engineering

Undergraduate Programs

Flight Vehicle Design Engineering

Theoretical and Applied Mechanics

Safety Engineering

Flight Vehicle Environment and Life Support System Engineering

Electric Engineering and Automation

Electronic Information Engineering

Air Vehicle Airworthiness

Graduate Programs

Flight Vehicle Design

Solid Mechanics

Fluid Mechanics

Fluid Machinery and Engineering

Coupling of Fluid-Solid and Control

Means of Transport Operational Engineering

Planning and Management for Traffic Transportation

Man-Machine-Environment System Engineering

Aeronautics and Astronautics Safety Engineering

Communication and Information System

Science of Material

Laboratories

National Key Laboratory of Science and Technology on Aerodynamic Design and Research



Key Laboratory of Fundamental Science for National Defense on Aircraft
Structural Mechanics and Strength Technology
Shaanxi Provincial Fan and Pump Engineering Research Center
National Teaching Center for Aeronautical Experiment

Research

In School of Aeronautics, the research fields are as follows:

New Concept Flight Vehicle design, Configuration Design and Evaluation Technology, Structural Integrated Design, Flight Dynamics and Control
Man-machine-environment Engineering, Aerospace Safety Engineering, Control and Integration Technology

Theoretical Aerodynamics, CFD, Aerodynamic Design, Experimental Aerodynamics, Flow Control, Aeroacoustics, Aeroelastics

Structural Fatigue, Fracture and Reliability, Structural Dynamics and Vibration Control, Impact and Dynamical Fracture Analysis, Mechanical Behavior Research of Composite Materials, New Numerical Methods and Algorithms In Solid Mechanics, Experimental Techniques For the Mechanical Properties of MEMS Materials

Airworthiness Technology for Civil Aircraft, Design, Simulation & Automatic test for Electronic and Electrical Systems, Mechatronic System Fault Diagnosis and Health Monitoring, Aircraft Virtual Maintenance, Aircraft Structure Corrosion Control and Surface Protection

International Partners

RWTH Aachen University, Germany
Technical University Braunschweig, Germany
German Aerospace Center (DLR), Germany
Delft University of Technology, Netherlands
Tokyo University of Science, Japan

International Cooperation

International Research Projects



Person in Charge	Project Name	Source of Project
Prof. Ye Zhengyin	Study of Aeroelasticity of Turbine Blades by Numerical and Analytical Method	Honeywell, USA
Prof. Li Dong	LER for Transition Control on Swept Wings	Airbus, Europe
Prof. Yang Zhichun	Material Damping Experiment	Honeywell, USA
Prof. Gao Chao	China-EU Aeronautical Science and Technology Cooperation Projects-AEROCHINA	Chinese Aeronautical Establishment
Prof. Gao Zhenghong	China-EU Aeronautical Science and Technology Cooperation Projects-AEROCHINA	Chinese Aeronautical Establishment
Prof. Li Dong	Manipulation of Reynolds Stress for Separation Control and Drag Reduction	EU Seventh Framework Program
Prof. Gao Zhenghong	Manipulation of Reynolds Stress for Separation Control and Drag Reduction	

School of Astronautics

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About the School

The School of Astronautics was founded in 1958 and is one of the earliest schools in China dedicated to the education and research of Astronautical Engineering. The school has excellent programs in Flight Vehicle Design, GNC (guidance, navigation and control), Propulsion Theory, Planning and Management for Traffic Transportation, and Launch Theory and Technique, as well as providing six Master's of Science and Ph.D. programs and three mobile post-doctoral research stations.

Currently, there are about 120 faculties and staff in the school, including two academicians of the Chinese Academy of Engineering (one is adjunct), 31 professors, and 35 associate professors. 84% of the faculty members hold doctoral degrees. The school has a total enrollment of over 1,200 students, including more than 800 full-time undergraduate students, 600 full-time graduate students and more than 200 part-time graduate students.

The school consists of five departments: Flight Vehicle Design Engineering, Flight Vehicle Control Engineering, Flight Vehicle Propulsion Engineering, Flight Vehicle System Engineering and Flight Vehicle Application Engineering, and the Institute of Flight Control and Simulation.

The School of Astronautics has two National Key Laboratories (Aerospace Flight Dynamics and Combustion, Flow and Thermo-structure), six Professional Subject Laboratories, three Academic Institutions and the Astronautic Experimental Education Center.

Faculty and Students

Faculty Members: 90

Academicians: 2

Undergraduates: 800

Master Students: 400

Ph.D. Students: 200

Departments

Department of Flight Vehicle Design Engineering

Department of Flight Vehicle Control Engineering

Department of Flight Vehicle Propulsion Engineering

Department of Flight Vehicle System Engineering

Department of Flight Vehicle Application Engineering

Institute of Flight Control and Simulation

Undergraduate Programs

Flight Vehicle Design and Engineering

Guidance, Navigation and Control Engineering

Flight Vehicle Propulsion and Engineering

Aeronautical and Astronautical Engineering

Graduate Programs

Guidance, Navigation & Control

Planning and Management for Traffic

Transportation

Flight Vehicle Design

Propulsion Theory and Engineering of

Aeronautics and Astronautics

Launch Theory and Technology

Laboratories

National Laboratories:

Science and Technology on Combustion, Internal Flow and Thermal-Structure National Laboratory

Science and Technology on Aerospace Flight Dynamics National Laboratory

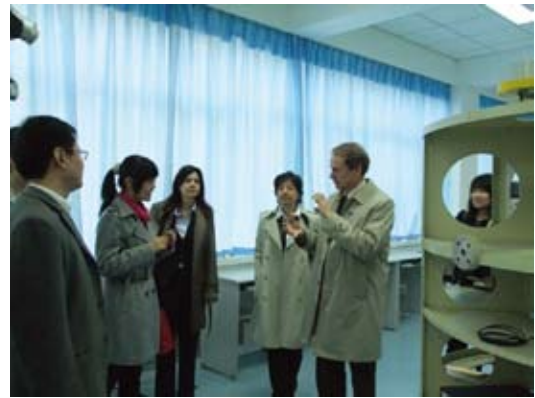
Provincial Engineering Centers:

Shaanxi Engineering Laboratory for Microsatellite

Shaanxi Engineering Center for Electrical Servo Systems

Research

The school has advantages in the research fields like Flight Vehicle Design and Optimization, Flight Mechanics, Guidance and Control Systems of Space Vehicle, Rocket Launching Fault Detection, Rocket Based Combined Cycle, Combustion of Energetic Material, Unsteady Flow inside Rocket Motor. The school has been granted more than 40 awards at provincial and ministerial level. These awards include the Outstanding Contribution Award for China's first manned space flight by the General Equipment Department of China, and the second prize in the State technological invention awards.



International Cooperation

In the school, about 1/4 faculty members have overseas work/education experiences. It also has invited three doctors from the US and Hong Kong to come to NPU in the capacity of visiting scholars. Since 2006, the school has selected and sent 15 graduate students to the US, the UK, France and Germany to pursue advanced degrees or study under united cultivation programs.

Since 1999, the school has employed more than ten foreign students. Two of them have obtained doctor's degree, including the first foreign Ph.D. in Shaanxi province.

The school has co-hosted many international conferences, such as the international conference on the aeronautical and astronautical technology between China and Russia.

In 2007, the department of Flight Vehicle Control Engineering of the school signed 5-year cooperation projects with the Ewrotech Group in Italy and the Shinco Electronics Group in Singapore. Currently the projects are going on smoothly.

The School of Astronautics has maintained a good relationship and collaboration with the United States, U.K., Canada and other countries. The school has set up a Small Satellite Joint Research Center with TU Delft University in Netherlands, and the School of Astronautics is an associate in international aerospace alliance organization. We have taken part in QB50 Project of the European Union in 2012, which will launch 50 microsatellites in 2015. The school has become the important unit in QB50 Project assisting and organizing other universities to complete the project.

School of Marine Science and Technology

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About the School

The School of Marine Science and Technology (SMST) was founded from the Department of Marine Engineering in July 2003, which was originally established in 1956. SMST consists of five departments and nine institutes and research centers, offering seven programs for Bachelor's degree, fourteen programs for Master's degree and four programs for Ph.D. degree. Two Ph. D. programs, namely Ocean Acoustics and Marine Robotics, are the State Key Disciplines.

The faculty, students, and staff of SMST develop technologies that are applied in areas from hydrodynamics to navigation and control of marine robotics, to ocean exploration, and conduct research to enhance the understanding of ocean acoustics and marine-related phenomena. The school provides rigorous intellectual opportunities to students and faculty alike, enabling our students and researchers to gain experience to work independently and collaboratively.

Increasing global ocean exploration needs and raising interests in marine economy, along with new technological advances, are placing renewed emphasis on the role of marine science and technology. SMST is determined to grasp this opportunity to build it into a school that is on the forefront of the marine-based engineering discipline in China.

Faculty and Students

Faculty Members: 140

Academicians: 3

Professors: 34

Associate Professors: 55

Undergraduates: over 800

Master Students: over 450

Ph.D. Students: over 250

Departments

Department of Mechanical and Power Engineering

Department of Electronic and Communication Engineering

Department of Acoustic and Information Engineering

Department of Environmental Engineering

Department of Automatic Control

Undergraduate Programs

Thermal Energy and Power Engineering
Machine Design, Manufacturing and Automation
Detection, Guidance and Control Technology
Electronics and Information Engineering
Information Countermeasure
Ocean Acoustics
Environmental Engineering

Graduate Programs

Acoustics (M.S. Ph.D.)
Fluid Dynamics (M.S.)
Mechanical-Electronic Engineering (M.S.)
Thermal Power Engineering (M.S.)
Power Electronics and Drives (M.S.)
Communication and Information System (M.S.)
Signal and Information Processing (M.S.)
Control Theory and Control System (M.S.)
Detection Technology and Automatic Equipment (M.S.)
Marine Robotics (M.S., Ph.D.)



Naval Architecture and Marine Engineering (M.S., Ph.D.)
Ocean Acoustics (M.S., Ph.D.)
Environment Science (M.S.)
Environmental Engineering (M.S.)
Information and Communication Engineering (Ph.D)

Post-Doctoral Stations

Information and Communication Engineering
System and Design of Underwater Vehicles
Naval Architecture and Marine Engineering



Laboratories

The State Key Laboratory of Underwater Information and Control
The State Special Laboratory for Acoustic Engineering and Measurement Technology
The Laboratory of Marine Hydrodynamics Laboratory (High Speed Water Tunnel)
The Laboratory for Underwater Power
Ocean Engineering Towing Tank
Ocean Engineering Teaching Laboratory



Research

The SMST strives to apply scientific research and higher education to better understand, protect, and utilize the oceans, which cover more than 70% of the earth's surface. We attract funding from a broad range of government and industry sources and work closely with our partners to understand and address current and future technology needs in ocean engineering. Research in the SMST focuses on several key areas, including Hydrodynamics, Acoustics and Communications, Navigation and Control, Naval Architecture, Marine Robotics, Ocean Environment and Marine Exploration. Through a collaborative and multidisciplinary approach, SMST has been consistently contributing to the further marine related science and technology, and national security.

Publications:

- More than 300 journal or conference papers are published per year, among which 200 academic papers are indexed by SCI, EI, or ISTP.
- Roughly eight monographs are published per year.

Awards:

- One First Prize of Chinese Science and Technology Award
- Five Second Prize of Chinese Science and Technology Awards
- One Third Prize of Chinese National Invention Award
- More than 100 Provisional or Ministerial Science and Technology Awards

Patents:

- More than 150 in total since 2003.



International Cooperation

The School of Marine Science and Technology has established collaborations with many universities and institutions in the USA, UK, France, Russia, Ukraine, Canada, and other countries. Most of faculty members and some of the graduates of the school have been involved in the joint research projects. Foreign professors are also invited to the school for academic exchanges.

Student Program

Undergraduate: "2+2+1" program with Faculty of Engineering, with the University of Strathclyde, UK.

Graduate: Under the China Scholarship Council (CSC) program, more than 20 students go abroad to pursue higher degrees every year.

The School of Marine Science and Technology has implemented determined search for more cooperation programs for its students and faculty members for the future of the school.

School of Materials Science and Engineering

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About the School

Founded in 1956, the School of Materials Science is one of the great strengths of NPU. The renowned tradition of teaching and research in materials science at NPU dates back to the foundation of NPU and continues to the present day. It is committed to staying at the forefront of educational and intellectual development. It provides a particularly friendly environment in which to study for a higher degree and to promote research in materials science. The school has three departments offering three undergraduate programs. The research is conducted in seven main fields.

Faculty and Students

Faculty Member: 178

Doctorial Advisors: 47

Yangtze River Scholars: 5

Winners of the State Fund for

Outstanding Youth: 6

Young Teachers of Excellence Awarded

by the Chinese Ministry of Education: 3

Academicians: 4

Undergraduates: 883

Master Students: 643

Ph.D. Students: 477

Departments

Department of Materials Science

Department of Materials Processing & Control Engineering

Department of Composites Materials

Undergraduate Programs

Materials Science & Engineering

Materials Processing & Control Engineering

Composites Materials & Engineering

Graduate Programs

Materialogy (M.S., Ph.D.)

Materials Processing Engineering (M.S., Ph.D.)

Computational Materials Science (M.S., Ph.D.)

Laboratories

The school is home to five institutes and centers to support teaching and research:

The Shaanxi Provincial Engineering Research Center of Carbon/Carbon Composite Materials

The Shaanxi Provincial Engineering Research Center of Advanced Materials & Solidification Processing

The Shaanxi Provincial Engineering Research Center of Friction Welding Technology

The Xi'an Engineering Research Center of Photo-Electrical Materials

The Functional Materials Institute of NPU

Research

Research in the school has always been conducted at the cutting edge of modern development. The research ability of the school ranks in the top three of its kind among the Chinese universities. Since the Seventh Five-year Plan, 28 projects were awarded the State Inventory Prize and the State Prize for Scientific Progress, and over 100 projects were awarded at the provincial level. Presently the school is undertaking more than 240 research projects funded by Project 973, Project 863, and the National Nature Science Foundation of China. In 2007, The Center for Foreign Talent Introduction & Academic Exchange for Advanced Materials forming Technology discipline was established, which has strong collaborative research links with a number of universities, institutions and industries in Europe, the United States, Japan, and Russia.



International Cooperation

In the last five years, 13 international conferences have been hosted through the effort of the center.

Faculty and students were sent to 170 different kinds of international conferences. The three following international projects were also funded.

Person in Charge	Project Name	Source of Project
Prof. Cheng Laifei	Oxidation behaviors and mechanisms of high temperature materials serviced in near space	The National Natural Science Funds
Prof. Li Hejun	FP7-PEOPLE-2009-IRSES-Advanced Biomaterials for Regenerative Medicine	EU 7 th Framework Programme
Prof. Yang Yanqing	Research on the Mechanical Behavior of nanophase materials	Emerson Company

School of Mechanical Engineering

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About the School

Founded in 2002 with the merger of the former Department of Mechanical Engineering and the Department of Aircraft Manufacturing Engineering, the School of Mechanical Engineering is one of the largest and most successful schools at NPU. With its remarkably broad spectrum of disciplines, it offers excellent opportunities and an exceptional environment for research and education. The departments involved are Aeronautics & Astronautics Manufacturing Engineering, Mechanical Engineering and Automation, Microsystem Engineering, Industrial Engineering, and Industrial Design. There are 208 faculty members in the school, including three Academicians, two Yangtze River Scholars, 41 full professors and 83 associate professors.

Faculty and Students

Faculty Members: 208
Academicians: 3
Undergraduates: 1530
Master Student: 808
Ph.D. Students: 375

Departments

Department of Aeronautics &
Astronautics Manufacturing Engineering
Department of Mechanical Engineering
and Automation
Department of Microsystems Engineering
Department of Industrial Engineering
Department of Industrial Design

Undergraduate Programs

Aircraft Manufacturing Engineering
Mechanical Design and Manufacturing
Automobile Engineering
Mechatronics Engineering
MEMS Engineering

Industrial Engineering
Industrial Design
Product Design
Mechanical Engineering (international)

Graduate Programs

Aeronautical & Astronautical Manufacturing Engineering
(M.S., Ph.D.)
Mechatronics Engineering (M.S., Ph.D.)
MEMS and Nano Technologies (M.S., Ph.D.)
Mechanical Manufacturing and Automation (M.S., Ph.D.)
Mechanical Design and Theory (M.S., Ph.D.)
Vehicle Engineering (M.S., Ph.D.)
Measuring and Testing Technologies and Instruments
(M.S., Ph.D.)
Precise Instrument and Mechanics (M.S., Ph.D.)
Industrial Design (M.S., Ph.D.)
Industrial Engineering (M.S., Ph.D.)
Management Science and Engineering (M.S., Ph.D.)
Electrical Theory and New Technology (M.S., Ph.D.)
Design Art (M.S., Ph.D.)
Biomedical Engineering (M.S., Ph.D.)



Laboratories

National Experimental Teaching Demonstration Center of Mechanical Foundation
 Key Laboratory of Micro/Nano Systems for Aerospace, Ministry of Education
 Key Laboratory of Contemporary Design and Integrated Manufacturing Technology, Ministry of Education
 Engineering Research Center of Shaanxi Digital Manufacturing Technology
 Shaanxi Engineering & Technology Research Center of Special Digital Manufacturing Equipment
 Shaanxi Manufacturing Informatization Productivity Promotion Center
 Shaanxi Engineering Laboratory for Transmissions and Controls

Research

Since the “Eleventh Five-year Plan”, the School has achieved much in innovation research with more than 1000 programs, including NSFC, 973, 863, and National Support Schemes. The amount of research funding increases year by year. The school has achieved 40 Provincial and Ministerial Awards for Scientific Progress. In recent years, the school has earned three technology inventions and two scientific progress awards at the national level, and one was ultimately selected in 2006 as “China’s top ten scientific and technological progress in higher education.” More than 1200 patents have been applied and 850 patents have been authorized including 240 patents for invention. 10 academic monographs

have been published.

The research of the school focuses on the following key development directions:

Advanced Manufacturing Technology
 Advanced Manufacturing Equipment and Technology
 Intelligent Plant
 Micro and Nano Technology

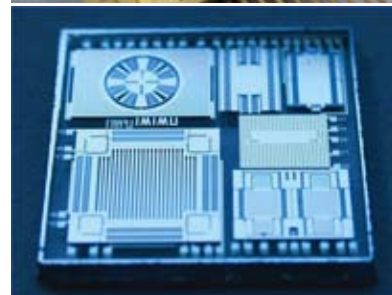
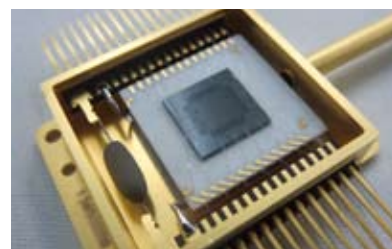
International Cooperation

Aviation Professional Outstanding Undergraduate International Communication project, INSA Lyon, France and Northwestern Polytechnical University, China. From 2009 to 2013, 41 outstanding undergraduate students have been educated from School of Mechanical Engineering.

The School of Mechanical Engineering established its international class in 2009. From 2012, it has been a combination of Chinese students and foreign students who are all taught in English. Famous scholars from abroad are invited to teach courses to students and give lectures to young teachers. For instance, Prof. Yuan-Shin Lee from North Carolina State University offered Automate System Engineering courses to students in the international class in 2013.

International Joint Institutes in the School:

Sino-British Institute of Mechatronic Product Research and Development
 Sino-British Bionic Rapid Manufacture Research Center
 Sino-American Cone Beam Volume CT Research Center of Image Engineering
 Sino-French Laboratory of Concurrent Engineering
 Sino-Belgium Laboratory of Aerospace Computing Techniques
 Sino-French Laboratory of Virtual Prototyping for Design and Fabrication
 Chiang Foundation Industrial Design Training Centre at NPU
 Sino-German Aero-Engine Manufacturing Joint Technology Center
 Sino-America Joint Institute for Engineering Design and Simulation



School of Mechanics, Civil Engineering and Architecture

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About the School

The School of Mechanics, Civil Engineering and Architecture (SMCEA) was founded in 2003 and is one of the key schools at Northwestern Polytechnical University (NPU). The school is staffed with excellent faculty of over 100 members, including one academican of the Chinese Academy of Science (Professor Zhu Weiqiu), 2 Yangtze River Scholars, 1 National Youth Thousand Talent Program Expert, and 28 professors (19 Ph.D. Supervisors). The Dean of the School, Professor Yue Zhufeng, is a recipient of the Alexander von Humboldt Science Foundation scholarship and a chair professor of the Yangtze River Scholars Program.

The school consists of three departments and four research institutes/centers. It offers five bachelor degree programs, six master degree programs, three Ph.D. degree programs and one postdoctoral program. It has one national specialized laboratory and one CSTIND key Laboratory. It is recognized as one of the six state educational bases of fundamental mechanics for engineering courses in China. Its Architecture and Civil Engineering specialty are recognized as featured specialties of Shaanxi province. Its Theoretical Mechanics and Mechanics of Materials courses are assessed as National Excellent Courses, and Elasticity Mechanics the Provincial Excellent Courses. In the past forty years, it has achieved impressive success on research and education. As an important base for scientific research and tertiary education in the fields of Mechanics, Civil Engineering and Architecture, it has made important contributions to the national and regional development.

Faculty and Students

Faculty Members: 104

Academician: 1

Yangtze River Scholars: 2

National Youth Thousand Talent Program Expert: 1

Undergraduates: 623

Master Students: 178

Ph.D. Students: 89

Departments

The Department of Engineering Mechanics

The Department of Civil Engineering

The Department of Architecture

Undergraduate Programs

Engineering Mechanics (B.S.)

Civil Engineering (B. E.)

Traffic Engineering (B. E.)

Architecture (B.Arch.)

Graduate Programs

General and Fundamental Mechanics (Ph.D.)

Solid Mechanics (Ph.D.)

Engineering Mechanics (Ph.D.)

General and Fundamental Mechanics (M.S.)

Solid Mechanics (M.S.)

Engineering Mechanics (M.S.)

Structure Engineering (M.E.)

Highway and Railway Engineering (M.E.)

Architectural and Civil Engineering (M.E.)

Architecture Design and Theory (M.E.)

Laboratories

National Specialized Laboratory for Dynamics and Strength

CSTIND Key Laboratory for Aircraft Structural Mechanics

and Strength Technology
 Laboratory for Large Scale Structures
 State educational bases of fundamental mechanics for
 engineering courses

Research

SMCEA has four research institutes/centers: the Institute of Vibration Engineering, the Mechanical Properties of Advanced Materials Testing Center, the Institute of Aircraft Reliability Engineering and the Sustainable Building and Environmental Research Institute (SBERI). It has strong capabilities of research and world-class experimental conditions. During the 11th five-year-plan period, SMCEA has undertaken more than 200 research projects at national, provincial and ministry levels. The amount of research fund has raised from about 1million in 2003 to more than 35 million in 2010. In recent years, faculty members of SMCEA have published more than 1200 research papers in high level and peer reviewed professional journals (in which around 800 has been cited by SCI, EI and or ISTP), published 13 academic monographs and received 10 science and technology awards at provincial and or ministry levels.

The main research areas in SMCEA include but not limited to the following

- Complex Dynamics Modeling and Simulation
- Theory of Vibration and Applications
- Astrodynamics
- Meso-damage Mechanics
- The Mechanical Behavior of Advanced Composites and Structures
- Theory and Applications of Multidisciplinary Design Optimization
- Dynamic Analysis and Computer Simulation of Engineering Mechanics
- Engineering Structure Control Theory and Applications
- Green / Ecological Building Design
- Sustainable Building Assessment

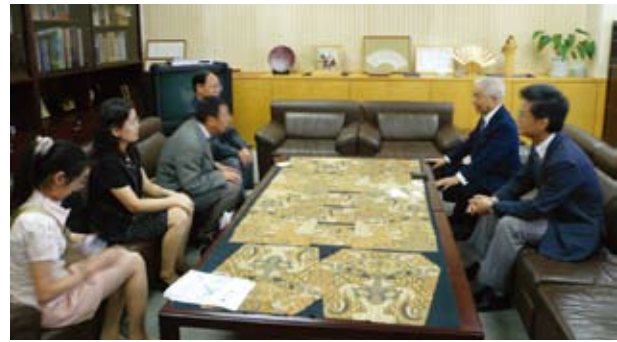
International Cooperation

Joint Research Projects

- Prof. Yue Zhufeng, Predictive service strength-life assessment model and technologies and microstructural integrity of Ni-based-single-crystal cooled blades, supported by The National Natural Science Foundation.
- Prof. Yan Yunju, Composite specimen machining and performance test, collaborate with The Hong Kong Polytechnic University.
- Prof. Liu Yu, Prof. Wu Nong, Early promotion of sustainable housing in China, collaborate with the Tokyo Metropolitan University.

Collaborate Research Organization

- Sustainable Building and Environmental Research Institute (SBERI) is an internationally collaborate research organization



of NPU, which cooperates with experts and organizations from Sweden, Japan, Australia and America in the broad areas of green, ecological and sustainable building design and environmental assessment.

Exchange Programs

- Each year, more than 20 undergraduate and postgraduate students are sent to overseas universities as exchange or joint educated students, approximately 10% staff members go to overseas universities/research institutes for short/long term cooperation, more than 10 staff members attend international conferences in overseas countries and regions. Currently, the overseas collaborative universities/research institutes mainly allocated in the following countries/regions: Germany, Sweden, Japan, America, Australia, France, UK, Hong Kong and Taiwan.

Members of international academic organization

- Prof. Yue Zhufeng is a member of the International Organization of Engineering Materials and Structures of Creep Fracture

International Journal

- Multidiscipline Modeling in Materials and Structures is an international journal which aims at publishing original and creative research contributions relating to multidiscipline modeling, design, optimization in materials and structures. It covers contributions from not only the classical subdivisions, but also from recently developing areas and interdisciplinary subjects. It provides a platform to researchers for the rapid exchange of ideas and techniques in multidiscipline interaction science and applications.

School of Power and Energy

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About the School

The School of Power and Energy is a critical part of the Aeronautics, Astronautics, and Marine Engineering, the core emphasis at NPU. The school's predecessor, the Department of Aero-Engine, within the original Northwestern Polytechnical University was founded in 1952, by combining the Aero-Engine specialty of Nanjing University, Zhejiang University and Shanghai Jiaotong University, and subordinated in the Aero-Engine Department of East China Aeronautical Institute. Authorized by the State Council in 1956, the East China Aeronautical Institute moved to Xi'an, and it was renamed the Xi'an Aeronautical Institute. Just one year later, this new institute in Xi'an merged with the Northwest Engineering Institute, establishing Northwestern Polytechnical University. In 1970, the Aviation Department of the original Harbin Military Engineering Institute merged with this school, providing further strength.

After more than 50 years of development, the school has already achieved remarkable progress in several research areas, some of progresses have reached the international advanced level, as well as the domestic leading position. Research work has resulted in achieving the scientific and technological progress awards, above the provincial and ministerial level, more than 60 items. The school publishes about 400 papers in domestic core journals each year.



Faculty and Students

Faculty Members: 84

Academician: 1

Undergraduate: 836

Master Students: 410

Ph.D. Students: 115

Departments

Department of Jet Propulsion

Department of Aviation Fluid Machinery

Department of Engineering Thermophysics

Department of Power Control and Test

Undergraduate Programs

Aircraft Power Engineering

Thermal and Power Engineering

Automation



Graduate Degree Programs

Engineering Thermal Physics (M.S.)
 Thermal Power Engineering (M.S.)
 Refrigeration and Low Temperature Engineering (M.S.)
 Control Theory and Engineering (M.S.)
 Signal and Information Processing (M.S.)
 Environmental Engineering (M.S.)
 Theory and Engineering of Aeronautical and Astronautical Propulsion (Ph.D.)
 Fluid Mechanics and Engineering (Ph.D.)
 Human-Machine and Environmental Engineering (Ph.D.)

Post-Doctoral Station

Theory and Engineering of Aeronautical and Astronautical Propulsion
 The main discipline
 Power Engineering and Engineering Thermo-Physics
 Aeronautical and Astronautical Science and Technology

Laboratories

The State Key Laboratory of Aerodynamics of Cascade
 The New Concept of Jet Propulsion Technology Key Laboratory of Fundamental Science for National Defense
 The State Specialized Laboratory of Thermal Engineering Information Processing Research

Since 2008, the yearly average fund to scientific research has been above 40,000,000 Yuan. Annually, there are more than 400 academic papers published, most of which are indexed by EI.

Awards:

- One Second Prize of Chinese National Natural Science Award
- One Second Prize of Chinese National Invention Award
- Two First Prize of Chinese Aeronautical Science and Technology Awards

Patents:

- More than 300 in total since 2003.
- Annually, around 30 patents are approved.

International Cooperation

The school attaches great importance to academic exchanges and international cooperation. In the past five years, it has sponsored several international and domestic academic conferences and carried out the foreign international technical cooperation actively. The school has established the scientific research cooperation with relevant universities and research institutions in the United States, Britain, Russia, Germany, Japan, and other countries. Four well-known aero-engine research and development organizations of the world have engaged in cooperative research with the school, including American United Technology Company, GE, Rolls-Royce Ltd., and the Russian Aero-engine Academia Sinica. And exchange scholars have visited the school each year.

The school has also established three joint research institutions. The Aerodynamics and Heat Transfer University Technology Partnership collaborated with Rolls-Royce Ltd., UK and Oxford University. The Sino-German Joint Institute of Monitoring and Control of Rotating Machinery and Wind Turbine worked with German Berlin Industrial University. The Sino-Russian Research Center of Airworthiness is connected with Russian CIAM

School of Electronics and Information

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About the School

The School of Electronics and Information (SEI), formerly the Radio Department of Northwestern Polytechnical University, was founded in 1958. There are 109 faculties, 1194 undergraduates, and 879 postgraduates in total. Four departments and one electronic experimental teaching center, 12 laboratories and centers including five provincial or ministerial level laboratories comprise the inventory of our research facilities. As well more than 5700 sets of instruments and equipment are available to students and staff. We can offer a broad program in undergraduate (B.S.) and graduate studies (M.S. and Ph.D.). SEI has expert hardware and software platforms for scientific research, and has 10,000 graduates at present. We have five international collaborative research institutes, and offer broad international collaboration with universities from more than ten countries. Currently, there are more than 20 part-time visiting professors and experts, about 30 foreign students, and more than 20 dual culture postgraduates.



Faculty and Students

Faculty Members: 135

Professors: 32

Ph. D. Supervisors: 26

Associate Professors and Senior Engineers: 47

Assistant Professors: 29

Undergraduates: 1194

Postgraduates: 879

Departments

Department of Electronic Science and Technology

Department of Electronics and Information Engineering

Department of System and Control Engineering

Department of Communication Engineering

Electronic Experimental Teaching Center

Undergraduate Programs

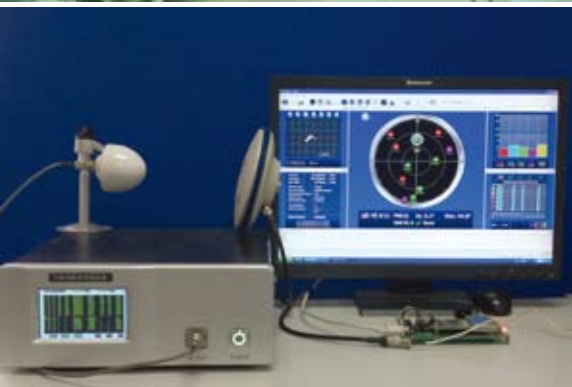
Electronic Science and Technology

Electronics and Information Engineering

Detection Guidance and Control Technology

Communication Engineering

Electromagnetic Field and Wireless Technology



Graduate Programs

Circuit and System
Electromagnetic Field and Microwave Technology
Microelectronics and Solid Electronics
Physical Electronics
Integrated Avionics Technology
Signal and Information Processing
Communication and Information Systems
System Engineering
Electrical Theory and New Technology
Biomedical Engineering
Educational Technology

Laboratories

Aerospace Electronic Information Sensing and Control of Optical, Key Laboratory of the Ministry of Education
Aeronautical Science and Technology Key Laboratory for Airborne Fire and Command Control System
Laboratory of Information Acquisition and Processing (Shaanxi Key Laboratory)
IOT Engineering Laboratory of Shaanxi Province
Nation-and-region Joint IOT Technology and Application Engineering Laboratory

Research

For the last five years, the SEI has been funded by National 973 Projects, National 863 projects, National Nature Science Foundation of China, Doctoral Programme Fund of State Education Committee, and Aeronautic Science Fund. In all over 6 million RMB from more than 60 projects has been invested. Close to 120 million RMB has been provided for support from more than 300 crossover projects between research institutes and companies. Up to now, the school has acquired five National defense Science and Technology Awards, five Shaanxi Science and Technology Awards, and more than 20 patents for technological invention.

International Cooperation

SEI has broad joint research programs with many well-known universities, industries and research institutes such as University of California, West Virginia University, University of Kent, University of Victoria, University of Waterloo, University of Surrey, University of Birmingham, French INSA LYON, Germany Charlotte School of Medicine, University of Oulu (Finland), University of Sydney, just to name a few. Every year, there are more than 40 visitors and experts at SEI on exchange programs.

SEI has established five international joint research institutions: International Center of Teaching & Research for Aeronautic System Effectiveness (MAI of Russia and NPU of China), International R&D Center for Digital Information Technology (MENS of France and NPU of China), Sino-German Joint International Institute of Information Technology, Texas Instruments-NPU DSPs Laboratory, Chinese-British Signal Processing and Wireless Optical Communication Institute.

School of Automation

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About the School

Since its foundation in 1980, the Department of Automatic Control has been one of the most important bases to develop key disciplines and advanced technology at NPU. In 2003, the department was renamed as the School of Automation to better reflect its characteristics. The school has maintained the highest academic both in research and teaching since its inception. The school has four departments offering five bachelor degree programs, fourteen master degree programs and eight doctoral degree programs.

Faculty and Students

Faculty Members: 143
Professors: 37
Associate Professors: 32
Lecturers: 26
Undergraduates: 1463
Postgraduates: 766
On-the-job Masters of Engineering: 129
Foreign Students: 111
Ph.D. Students: 343
Engineering Ph.D.: 1

Undergraduate Programs

Automation
Electrical Engineering and Automation
Measurement & Control Technology and Apparatus
Information Engineering
Transportation Equipment and Control Engineering
Information Security (including Confidentiality Direction)

Graduate Programs

Control Theory & Engineering
Navigation, Guidance & Control
Pattern Recognition & Intelligent Systems

Systems Engineering
Detecting technology & Automatic Devices
Electric Machines & Electric Appliances
Power Electronics & Power Drive
Power system and Automation
Precision Instruments & Machinery
Traffic Information Engineering and Control
Transportation Programming and Management
Network and Information Security

Departments

Department of Flight Control
Department of Electrical Engineering
Department of Measurement & Control Technology and Apparatus Engineering
Department of Traffic and Control Engineering
Department of Control and Information

Laboratories

Key Laboratory of Special Technology on UAVs, Control Simulation Branch
Key Laboratory of Information Fusion Technology, Ministry of Education
Engineering Research Center of Electrical System Technology for Aeronautics and Astronautics, Ministry of Education
Key Laboratory of Flight Control & Simulation

Technology, Shaanxi Province

Key Laboratory of Small & Special Motor and Drive Technology,
Shaanxi Province

Traffic Safety Monitoring Network Engineering, Shaanxi Province

Engineering Technology Research Center of Rare Earth Permanent
Magnet Electric Machine & Control System, Shaanxi Province

Research

Achievements in research include patents, academic monographs and three provincial level awards called Technology Invention Award, Scientific Advancement Award and Natural Science Award and so on. The school takes great pride in its research abilities.

B-2 Drone Aircraft, 1978 National Science Conference Award;

Performance Innovation of KJ-3 Autopilot and Flight Test Research, 1978 National Science Conference Award;

Air Refueling Engineering, National Technology Invention Award, and Outstanding Prize;

Rare Earth Permanent Magnet Motor Energy Efficient Textile, National Technology Invention Award, Second Prize;

Finite Element Analysis and Optimization Design of Aeronautic Rare Earth Permanent Magnet Generator Topologies, National Technology Invention Award, Third Prize;

Theory and Application of Maneuvering Multi-target Tracking in Intensive Multi-echo Environment, National Technology Invention Award, Third Prize;

Rare Earth Permanent Magnet Dual Current Synchronous Motor Used in Small Aircraft, National Technology Advancement Award, Fourth Prize.

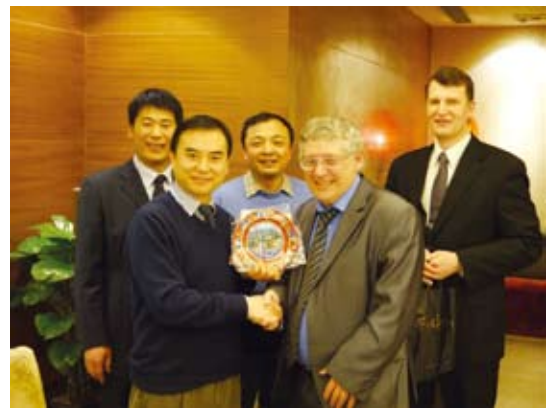
Moreover, in recent years, the school greatly emphasizes on high-level academic papers. As a result, the quantity and quality of published papers are improving year by year. For example, the number of SCI and EI papers in 2005 was two and six respectively, while in 2012 it had increased to 20 and 104. During the past three years, more than 10 faculties were invited to present their work in international conferences.

International Cooperation

The school plays an active role in international cooperation to strengthen and improve the teaching quality of undergraduate and postgraduate. The following is a table of joint research institutions.

Joint Research Institutions

Name of the Organization	Name of the Foreign Cooperation Organization	Foundation Year	Person in charge
B & R NPU Joint Laboratory	B&R Company	1997	Prof. Lin Hui
Biomedical Imaging and Analysis Joint Laboratory	Harvard Medical School	2006	Prof. Guo Lei
Perception and Computing of High-performance Network	Hong Kong Polytechnic University	2007	Prof. Pan Quan
Chinese-Russian International Space Tether System Research Center	Samara Aerospace University	2012	Prof. Wang Wei



School of Computer Science and Technology

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About the School

The School of Computer Science and Technology dates back to 1958 when Computer Science, as an autonomous academic subject, was founded at NPU. The Computer Science Teaching and Research Section was appended in 1970. Finally in 1981 Computer Science and Engineering became a separate department expanding over years to reach its present school size in 2002.



Faculty and Students

Faculty Members: 143

Academician: 1

Undergraduates: 890

Master Students: 310

Ph.D. Students: 179

Departments

Department of Computer Science and Software

Department of Computer Systems and Microelectronics

Department of Computer Information and Engineering

Department of Information Security and Electronic Commerce

Undergraduate Programs

Computer Science & Technology

E-Commerce Technology

Internet of Things Engineering



Graduate Programs

Computer Science and Technology
Computer Organization and Architecture
Computer Software and Theory
Computer Applications Technology
Network and Information Security
Software Engineering

Laboratories

Engineering Research Center of Embedded System Integration, Ministry of Education
Shaanxi Provincial Key Laboratory of Embedded System Technology
Shaanxi Provincial Key Laboratory of Speech and Image Information Processing
Shaanxi Provincial Engineering and Technical Research Center for Sensor Networks and Intelligent Control
Xi'an Integrated Circuits Design Engineering Technology Research Center
Shaanxi Provincial Cloud Computing Technology Engineering Research Center
National and Local United Engineering Lab of the Internet of Things Technology and Application

Research

In recent years, we have won 33 provincial awards, two first prizes, 12 second prizes, 19 third prizes and applied for 138 patents, 62 of which were authorized and 65 software copyright; We have published around 30 monographs and textbooks. The school has 1830 papers published in three indexes (SCI 136, EI 1233, ISTP 461).

International Cooperation

The School has more than twenty years close collaboration with Dept. Electronics & Informatics, Vrije Universiteit Brussels (VUB), Belgium. In 2005, we built a joint Laboratory of Audio Visual Signal Processing, with the main research areas in audio visual human-machine interaction (HCI), audio visual scene analysis, audio visual affective computing, etc. In 2010, they joined together in the LIAMA consortium.

During the past few years, we have undertaken two bilateral projects between the Ministry of Science and Technology (MOST), China, and the Flemish government, Belgium. In 2012, Prof. Jan Cornelis from Dept. ETRO (currently the vice president of foreign affairs, VUB) won the "San Qin Friendship Award" from the Shaanxi government for his great contribution in facilitating the collaboration between the two universities.

School of Sciences

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About the School

The School of Sciences (SOS) was founded in July 2003 as a combination of the former Department of Mathematics and Information Science, Applied Physics, and Chemical Engineering. SOS consists of three departments and five institutes, offering nine programs for Bachelor's degree, 19 programs for Master's degree and six programs for Ph.D. degree, among which the Ph. D. program of Materials Physics and Chemistry is officially evaluated as one of the State Key Disciplines.

In SOS, the concept of combining science with technology and bringing together theory with practice is emphasized, forming an effective operation mechanism of "scientific research promoting specialty teaching and specialty teaching facilitating scientific research in turn". SOS provides the philosophical and methodological background to our work and, importantly, promotes communication and public understanding of science.

In the future, SOS is determined to grasp the golden historic opportunity of education development and match that with the large-scale development in the west of China so as to build SOS into a school that is pioneering in the west of China, first class in China and well-known in the world.

Faculty and Students

Faculty Members: 203

Academicians: 2

Professors: 53

Associate Professors: 58

Undergraduates: 1304

Master Students: 554

Ph.D. Students: 277

Departments

Department of Applied Mathematics

Department of Applied Physics

Department of Applied Chemistry

Undergraduate Programs

Mathematics and Applied Mathematics

Information Science and Computation Science

Statistics

Applied Physics

Materials Physics

Optical Information Science and Technology

Polymer Material and Engineering

Chemical Engineering and Technology

Environmental Science

Graduate Programs

Pure Mathematics (M.S.)

Applied Mathematics (Ph.D.)

Computational Mathematics (M.S.)

Materials Physics and Chemistry (Ph.D.)

Probability and Statistics (M.S.)

Optical Engineering (Ph.D.)

Analysis and Integration of Systems (M.S.)

Condensed Matter Physics (Ph.D.)

Statistics (M.S. Degree of Economics)

Polymer Chemistry and Physics (Ph.D.)

Operational Research and Cybernetics (M.S.)

Materialogy (Ph.D.)

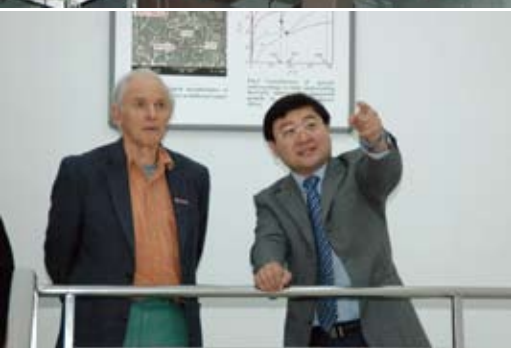
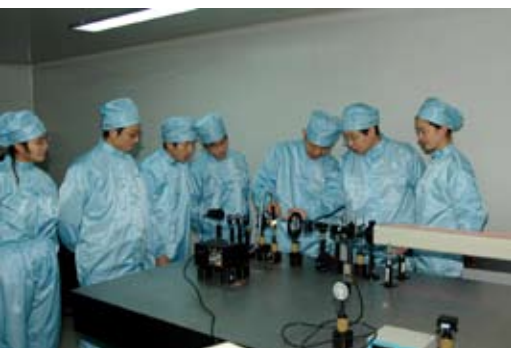
Optics (M.S.)

Materials Processing Engineering (Ph.D.)

Physical Chemistry (M.S.)

Applied Chemistry (M.S.)

Biomedical Engineering (M.S.)



Environmental Engineering (M.S.)
Chemical Technology (M.S.)
Post-Doctoral Stations
Mathematics

Laboratories

The Key Laboratory of Space Applied Physics and Chemistry, Ministry of Education
The Shaanxi Provincial Key Laboratory of Space Materials Science and Technology
The Shaanxi Provincial Key Laboratory of Condensed Matter Structures and Properties
The Shaanxi Provincial Key Laboratory of Optical Information Technology
The Shaanxi Provincial Key Laboratory of Polymer Science and Technology

Research

In the School of Science, multidisciplinary research is conducted in Space Materials Science, Smart Materials Science, Optical Information Technology, Computing Mathematic, Analysis on Nonlinear Stochastic Dynamic Systems, Applied Probability and Statistics, Functional Polymer Materials, Resin Matrix Reinforced Composites, High-performance Plastic and Processing Engineering.

Academic Papers:

Annually, there are more than 400 academic papers published, among which 250 academic papers are indexed by SCI.

The achievements of acoustic levitation research were reviewed in Science and Nature. The Electrorheological Fluids research paper was rated as Top 1% of high ISI cited papers. Optical characterization research results were selected as one of the most important progresses in 2008 on Optics & photonics News of the Optical Society of America.

Awards:

- One Second Prize of Chinese National Natural Science Award
- One Second Prize of Chinese National Invention Award
- Two First Prize of Chinese Aeronautical Science and Technology Awards
- Six First Prize of Shaanxi Provincial Science and Technology Awards

Patents:

- More than 400 in total since 2003
- Around 40 approved patents are annually

Monographs:

- More than 20 since 2010
- Roughly eight published monographs

International Cooperation

The School of Science has established cooperation with many universities and institutions in the U.S.A., Germany, U.K., France, Japan, Switzerland, the Netherlands, and Canada. Many staff and graduates of the school are sent abroad to conduct cooperative research projects. More than 65 foreign professors have come to this school in academic exchanges. Dr. W. Kurz of Swiss Federal Institute of Technology was awarded with "Chinese Friendship Prize" from the Chinese government and the "San Qin Friendship Prize" by the Shaanxi Province government for his excellent cooperation.

Student Programs:

Undergraduate "2+2+1" program with School of Mathematics & Statistics at the University of Glasgow, Scotland, UK.

Annually, more than 20 students will further their study at universities abroad under CSC program.

The School of Science has implemented determined search for more cooperation programs for its students and teachers as well as for the future of the school.

School of Management

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About the School

The School of Management was established in March 1985. With more than 20 years of development, it has evolved into an influential school in NPU for systematic disciplines, and rich teaching resources. The Western Research Center for the Development of Science Technology and Industry for National Defense, the International Project Management Research Institute, the Emergency Management Institute and Design Management Institute of NPU are attached to the School. The School of Management is eligible to offer degrees in the discipline of management science and engineering, including one doctoral degree program, four master degree programs, four professional master programs (EMBA, MBA, MEM, and ME in the fields of Industrial Engineering, Logistics Engineering and Project Management), and five undergraduate programs. The school has become an important education center for management in China. The school has maintained a very close tie on an extensive scale with Xi'an Aircraft International, Space Technology Group, Chinese First Airplane Design and Research Institute, Changqing Oil Corp etc.



Faculty and Students

Faculty Members: 72

Professors: 22

Associate Professors: 34

Undergraduates: 478

Postgraduates: 1104

Ph. D. Students: 110

Departments

Department of Business Administration

Department of Management Science and Engineering

Department of Information Management

Department of Economics and Trade

Department of Accounting

Undergraduate Programs

Business Administration

Marketing

Information Management and Information System

Accounting

Project Management



Graduate Programs

Management Science and Engineering (Ph.D.)
 Management Science and Engineering (M. S.)
 Corporation Management (M. S.)
 Technology Economic and Management (M. S.)
 Accounting (M. S.)
 Professional Master's degree (EMBA, MBA, MEM, ME)

Facilities and Resources

To assist the teaching and research, the school has four laboratories and one center: Business Administration, Management Science and Engineering, Information Systems, Economics and Trade, and YonYou ERP Experiment Center.

Accomplishments

In recent years, the school has undertaken and concluded more than 100 research projects sponsored by the National Natural Science Foundation of China, National Social Science Foundation of China, the National Aviation Foundation and Project 863. The school enjoys great prestige for the 20 awards won at the ministerial and provincial level, 30 academic works and textbooks, and 1000 research papers published at home and abroad. The information services, diagnostic services, consulting services, and training programs provided by the school along with the way for research and production, have been highly praised for the breaking-through achievements made both in the theory and in practice.

International Academic Cooperation

The school enjoys strong links with universities, institutes, and industries from USA, UK, France, Canada, Japan, Sweden, and Italy, etc. The school is one of founding members of the Alliance of Chinese & European Business Schools (ACE).



School of Humanities, Economics and Law

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About the School

The School of Humanities, Economics and Law is a school of liberal arts in Northwestern Polytechnical University (NPU). There are in it three departments: Department of Economics, Department of Law, and Department of Public Administration. The MPA Education Center of NPU and the Ideological and Political Theory Teaching and Research Section of NPU are also located in the school.

The school has 78 faculty members, among whom 66 are teachers, including 15 professors, 29 associate professors, one member of the National Teaching Steering Committee, one NPU Aoxiang scholar, one Aoxiang distinguished teacher and 11 Ph.D. candidate supervisors. The cultural celebrities such as Chen Zhongshi, Zhao Jiping and Wang Meng and the well-known specialists such as Chen Yijian, Zheng Yongting and Zhang Yaocan are appointed as adjunct professors of the school.

The school has one Ph.D. degree-awarding discipline, 17 Master degree-awarding disciplines and four undergraduate programs. At present, there are more than 700 Ph.D candidates, master degree students or undergraduate students.

The school has a commercial and governmental affairs laboratory, a judicial expertise laboratory, a moot court, a Chinese book reference room, the Shaanxi Province Deng Xiaoping theory reference room for universities and colleges.

The school undertakes the building-up of the Philosophy and Social Sciences Base of the West China National Defense Industrial Development and Research Center under the Project 985 of the Ministry of Education. It also takes on research projects assigned by the Social Science Foundation of China, the Natural Science Foundation of China, the Ministry of Science and Technology, the Ministry of Education, the Ministry of Industry and Information Technology and so on. The course "An Introduction to the Mao Zedong Thought and the Theory of Socialism with Chinese Characteristics" is appraised as a provincial top-quality course.





Faculty and Students

Faculty Members: 78
Undergraduates: 454
Master Students: 195
Ph.D. Students: 63

Departments

Department of Economics
Department of Law
The Ideological and Political Theory Teaching and Research Section
Department of Public Administration

Undergraduate Programs

International Trade
Law

Eight first-order Disciplines

The Marxist Theory
Political Science
Law Science
Public Administration
Theoretical Economics
Applied Economics
Art Science
Educational Science

International Cooperation

The Department of Law recently has established the long-term teaching and research partnership in the form of academic exchange of teachers and students with the Zhongzheng University in Taiwan.

The School has established exchanges and cooperation in personnel training, scientific research, and exchange of teachers with the educational or research institutions in Europe, the United States and other countries and regions, including Taiwan.

School of Software and Microelectronics

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About the School

As one of the Demonstration Software Schools in the country, the School of Software and Microelectronics, NPU was authorized and established in 2001 by the Ministry of Education and the Commission of National Development Planning in accordance with a strategic adjustment of the national economy and the urgent need for engineers in software and the microelectronics industry.

Aiming at the international advanced IT sector, the school introduces and processes the leading results, and explores new ways to realize the integration between software talent cultivation and international demand. Apart from introducing software engineering courses of Carnegie Mellon University, the school has also invited highly respected professors, industrial experts and engineers from both home and abroad to deliver lectures bilingually with the latest text books. In teaching fundamental knowledge, the school lays stress on delivering new technology, cultivating practical abilities and enhancing professional quality.

The school respectively passed the mid-term assessment of the Ministry of Education in 2003 and performance assessment by the Ministry of Education in 2006 with advanced ranks. The education reform project "The Innovation and Practice of International Engineering Software Talent Cultivation" won the 2009 national teaching achievement award for second prize.

Faculty and Students

Faculty Members: 91

Professors: 13

Associate Professors: 27

Undergraduates: 1156

Master/ MPhil Candidates for both Graduation Certificate and Master Degree: 253

Master Candidate for only Master Degree: 1340





Undergraduate Programs

Software Engineering (With 4 Different Directions)
 Software System Development
 Electronic Services
 Digital Media
 Embedded System
 Microelectronics Science and Engineering (B.E.)

Graduate Programs

Software Engineering (M.E., Ph.D. in Engineering)

Facilities and Special Resources

The school has 13 laboratories for teaching, covering over 2200 square meters, which allows over 700 students to do experiments at the same time.

Originating in the school, a series of State Sponsored Bases have been established, including:

National Software Talent International Cultivation Center (Xi'an), approved by State Administration of Foreign Experts Affairs in 2003,

National IC Talent Cultivation Base, by the Ministration of Education in 2004,

National Linux Technical Cultivation Center, by the Ministration of Technology in 2005

Research Results

Constructing an enhanced research team and employing it in platform and integrating scientific analysis direction, the school renews itself through on-going exploration work. In recent years, the school has chaired or undertaken two projects founded by the National Natural Science Foundation of China and more than 120 research papers have been published in well-known journals both home and abroad, mainly focusing on: Software System Modeling Analysis and Verification, Software Development and Quality Assurance, Service Computing and Service Engineering, Domain-oriented Software Engineering, Digital Media Software Design.

International Cooperation

With the objectives to build a high-level and multi-level software talents training center with advanced technology and particular characteristics, the school has attached great importance to international cooperation, and has developed fusions with international partners, including:

Long-term agreement with Carnegie Mellon on introduction of SSD series courses;
 Long-term agreement with The Study Abroad Foundation (SAF) on student exchange;

Long-term agreement with the School of Electrical Engineering, Mathematics and Computer Science TU Delft on student exchange;

Joint Research with the Lab of Computer Engineering, TU Delft ;

Joint Laboratory on Cloud computing with Japanese company Universe;

In the academic year of 2012-2013, 14 students have studied abroad for more than six months and five teachers as visiting scholar for more than 3 month.

School of Life Sciences

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About the School

The School of Life Sciences, formerly known as the "Faculty of Life Sciences", was established in April 2004. The name was changed to the School of Life Sciences officially in March 2010, and became the 15th academic school of NPU. Combined with the aeronautics, astronautics, and marine technology education and research characteristics of NPU, the School of Life Sciences mainly focuses on the research and teaching of Space Life Science, Special (Extreme) Environmental Biology and Biotechnology, and related Basic Medicine and Biomedical Engineering, in particular, Space Biology, Space Biotechnology, Aerospace Medicine & Engineering, and Magnetic Biology.

Faculty and Students

Faculty Members: 42

Professors: 7

Associate Professors: 11

Overseas Honorary and Consultant Professors: 12

Part-time Chinese professors: 6

Undergraduates: 100

Master Students: 49

Ph.D. Students: 34

Departments

Department of Biomedical Engineering

Department of Biology

Undergraduate Program

Biotechnology



Graduate Programs

Biomedical Engineering (M.S., Ph.D.)
 Space Medical Engineering
 Protein Engineering and Drug Design
 Biological Electromagnetic Technology
 Biomedical Materials
 Biomedical Image and Information Processing
Aeronautical and Astronautical Science and Technology (Ph.D.)
Materials Science (Ph.D.)
Biology (M.S.)
 Cell Biology
 Biochemistry and Molecular Biology
 Biophysics
 Microbiology
 Physiology



Post-Doctoral Stations

Aeronautical and Astronautical Science and Technology
 Materials Science

Laboratories

Key Laboratory of Space Bioscience and Biotechnology

Facilities and Special Resources

To assist the teaching and research, the school has 6 specialized laboratories, 8 functional laboratories and 2 centers, covering over 3500 square meters. In particular, the school has some simulated experiment platforms for space life science research, including the diamagnetic levitation platform and hypomagnetic research platform (<300 nT). The bioeffects of magneto-gravitational environment, and crystal growth of biological macromolecules were investigated based on these special facilities.

Research

During the past several years, the School of Life Sciences has undertaken more than 120 research projects (provincial level or above, more than 60 items), including three "National Basic Research Program of China (973 programs)" (one project and two sub-projects), 10 "National High-tech R&D Program of China (863 programs)" (including a key grant project and a key sub-project) and 31 "National Natural Science Foundation of China". It has published more than 300 papers, in which more than 80 articles have been indexed by the SCI, and more than 20 by the EI. Furthermore, more than 40 patents have been authorized.

International Cooperation

The School of Life Sciences has strong collaborative research links with the German Aerospace Center (DLR), the French Space Agency (CNES), the Japan Aerospace Exploration Agency (JAXA), Japan Institute for Materials Science (NIMS), Harvard University (USA), Wayne State University (USA), University of Texas (USA), University of Sydney (Australia), Laval University (Canada), University of Strathclyde (United Kingdom), Charité–University Medicine Berlin (Germany), University of Tokyo (Japan), Hong Kong Baptist University and a number of internationally renowned research institutions in Space Biology and Biotechnology, Aerospace Medicine & Engineering and Biophysics field. We also invite many world-renowned professors to give characteristic curriculums to our undergraduate and graduate students, such as Extreme Environmental Physiology by Professor Hanns-Christian Gunga from Charité–University Medicine Berlin, Germany. Joint Research Platform of the School has carried out substantive cooperative and personal exchanges, which has earned it a high quality and an academic reputation within the international university arena.

School of Foreign Languages

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About the School

The English Subject of Northwestern Polytechnical University has a long history, a deep foundation and a high belief. It has established the master degree point of Foreign Linguistics and Applied Linguistics since 1984, which is the first technological university in the northwestern region that can award this secondary discipline. The English department was founded in 1985 and enrolled four-year English major undergraduates from 1993 on. In December of 2002, it was approved to set the master degree point of German Language and Literature. At present, the English Department has provided the complete teaching on English, Russian, Japanese, German and French for different levels of the whole doctor, master and bachelor students.

The School of Foreign Languages has set the Foreign Language Department of Literature and Foreign Language Education Department. The school has 100 faculty members, among whom 93 are full-time teachers, including 10 professors, 34 associate professors, one member of the National Teaching Steering Committee, two provincial-level distinguished teachers, one NPU Aoxiang scholar, one Aoxiang distinguished teacher. Every year more than ten foreign teachers of America, German, Britain and Sweden teach foreign culture in the school. So far, there are four post-graduate degree-awarding disciplines and two undergraduate programs, and 358 students including postgraduates and undergraduates.

The school has built eight multimedia voice classrooms, simultaneous interpretation laboratories, and foreign language reference rooms. And it also has the Cambridge Business English Certificate (BEC) examination service.

The course "College English" offered by the school is appraised as a national top-quality course. In 2009, the school was rewarded two second prizes of the National Excellent Teaching Achievement Award. In



2010, the university teaching team was rewarded as the national excellent teaching team. The NPU's team of the Model UN tutored by professors of the school, which is a backbone base of the Model UN activity, has a brilliant performance and is widely known in the country. In the areas of student education, exchange visits of teachers and research collaboration, the school has established the exchange and cooperation relations with the educational or research organizations of several countries such as the US and Sweden. Each year, over 10 international teachers from the US, German, the UK, Sweden, Australia and other countries teach at the school.



Faculty and Students

Faculty Members: 100
Undergraduates: 271
Master Students: 87

Departments

Department of Foreign Language Education
Department of Foreign Languages and Literature

Undergraduate Programs

English
German

One First-order Disciplines

Foreign languages and literature

International Cooperation

In the school, the Department of Foreign Languages and Literature has started exchange programs with Johnson County Community College (JCCC), Whitman College in America since 1980s. Recently, the department has started exchange program of teachers and students with Karlstad University in Sweden.

International College

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About the School

The International College of NPU was founded in 2007 and in the same year, NPU became one host university of Chinese Government Scholarship acknowledged by the China Scholarship Council of the Ministry of Education. Since then, the university has continuously received international students of different majors all over the world.

The scale of the international student enrolment has increased at a fast pace in the ensuing years. Till 2013, 774 international students have pursued their studies in NPU, among whom 524 were long-term students and 250 short-term students. The International College offers various programs in English and Chinese medium to meet the requirements of different applicants and disciplines.

There are 14 schools of NPU which offer bachelor, master and Ph. D. programs to international students. We selected experienced professors and supervisors proficient in English to guide and work with international students. NPU also holds several exchange programs with prestigious universities all over the globe. The Sino-U.S. Culture and Humanity Program attracts American students to pursue their studies here each year. As well we have established relationships with key Korean universities which are sending exchange students continuously. The International College, in its capacity as host institution, gives long-term and short-term Chinese language courses to applicants of different competency levels.





Life on Campus

NPU provides students with various, well-equipped apartments in different specification and conditions. Examined and approved by government, the campus has many kinds of dining rooms and restaurants. There are, too, hospitals, stores, banks, gyms and well-equipped sports fields nearby which bring great convenience to students. The International Students Apartment is equipped with air conditioners, refrigerators, desks, washing machines, internet access and cooking appliances.

English Medium Programs

NPU started to offer post graduate programs in different schools English language courses at the beginning in 2003. Till now, more than 100 post graduate students have completed an upper level degree from NPU. Beginning in 2009, NPU launched the bachelor programs in English medium. At present, we offer four programs for applicants looking for a bachelor degree in the English medium, namely, Aeronautical Engineering, Mechanical Engineering, Electrical Engineering and Electronics and Information Engineering.

Scholarship

1. Chinese Government Scholarship: Each year, NPU can enroll students with full scholarship and living allowance supported by the Chinese Scholarship Council.
2. Wu Yajun Scholarship: Students who achieved excellent performance will be nominated for Wu Yajun Scholarship which aims at rewarding outstanding students from China and abroad.
3. Annual Award: The International College will select excellent students regarding their comprehensive performance in the past academic year.
4. Excellent Freshmen Scholarship: Each session, NPU will award scholarship for excellent bachelor students regarding their high school performance.

XI'AN

Xi'an is one of the origins of world civilization with as long as more than 3000 years history, and thirteen dynasties set up their capitals here. As early as the Western Han period (207B.C. – 25A.D.), the “Silk Road”, which started from Xi'an, connected the East with the West, and promoted the exchange of economy and culture. During the blooming Tang Dynasty (618A.D. – 907A.D.), Xi'an was the world's trade center, which set up trade relations with Eastern Asia, Southern Asia, and Eastern Europe.

There are important sites and relics in this city. The Terracotta Horses and Warriors of the Qin Emperor is one of the eight wonders of the world. The Famen Temple is the only temple in China that has the true relics of Buddha Sykyamuni. There is also the City Wall, the Bell Tower, the Drum Tower and the Big Wild Goose Pagoda.

Xi'an is an attractive and popular city not only by its historical sites. It is also a major center of industrial, manufacturing, and intellectual life of China. It is the center of the greatest concentrations of higher learning institutions in China and has much to offer the students both academically and socially.



