

# 2022

## International Catalog

Wenzhou University



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# WHY CHINA

# WHY WENZHOU

# WHY WZU

## Why WZU ?

### Scholarship Prospects

Affording study in China is easier for the outstanding students when selected for scholarships from China Scholarship Council, Zhejiang Province, and our university.

### Affordability

With government scholarship opportunities and cost of living reasonable allows for you to plan your finances over the length of your studies.

### Online Learning

Experience Chinese education while you are away with up-to-date virtual learning tech.

### Smart Classrooms

Online learning is offered using the latest internet teaching technologies found in over 55 classrooms that ensures you can study anywhere in the world.

### Program Subjects

Pursue your studies from many different program options such as science, business, law, engineering, computer science, language learning and more.



### Learning In English

Over 17 undergrad and graduate degree programs are taught in English with professors having international experience making your study easier while you learn Chinese Language.

### Distinguished Campus

Located here are national investments in technology, research bases, and labs - all inside a beautiful campus with prestigious facilities and surrounded by mountains and nature.

### Career Prospects

Set yourself apart through hands-on practice and industry and academic joint experiences with many possibilities of internships.





## Why China ?

### Chinese Language Skills

Being a safe destination and top influence in the world from business to science, you can gain greater access to China by learning Chinese.

### Chinese Culture Experience

The experience of Chinese ancient culture and beautiful scenery will fascinate you!

### Future Job Opportunities

More than a major to set yourself to potential employers. International student graduates are reported to find jobs faster and have higher starting salaries. The global job market has a higher demand in bilingual Chinese abilities needed for exchanges with China in commerce, technology, and science.

### Grow Your Network

Your international and Chinese classmates will have an amazing experience with you, together you will meet new people, and experience the food and customs of another culture.



the Great Wall

## Why Wenzhou ?

### Worldwide Recognition

Worldwide business reputation that is an innovative capital of China.

### Vibrant Innovation Capital

As a launching pad for many global businesses, you will find Wenzhounese people around the world. The entrepreneurial spirit is well known that will inspire you.

### Friendly People

Awarded as one of China's Happiest Cities, you will be sure to find a friendly environment in Wenzhou.

### Modern Big City Amenities

Everything from culture, transportation, shopping, and living will keep you comfortable at a reasonable cost.



# GET TO KNOW THE UNIVERSITY



Nestled within picturesque mountains, vast waterways, and the heart of a vibrant coastal city, Wenzhou University (WZU) offers unparalleled educational opportunities for students who are looking to study within a rich cultural environment and benefit from a strong academic tradition. Of the more than 2,500 colleges and universities located throughout China, WZU ranked 167th in China according to 2021 *U.S. News & World Report* Best Global Universities Rankings. Meanwhile, WZU ranked 3rd in Zhejiang province according to the *Times Higher Education* World University Rankings 2021.



A bird's-eye view



East Gate of South Campus

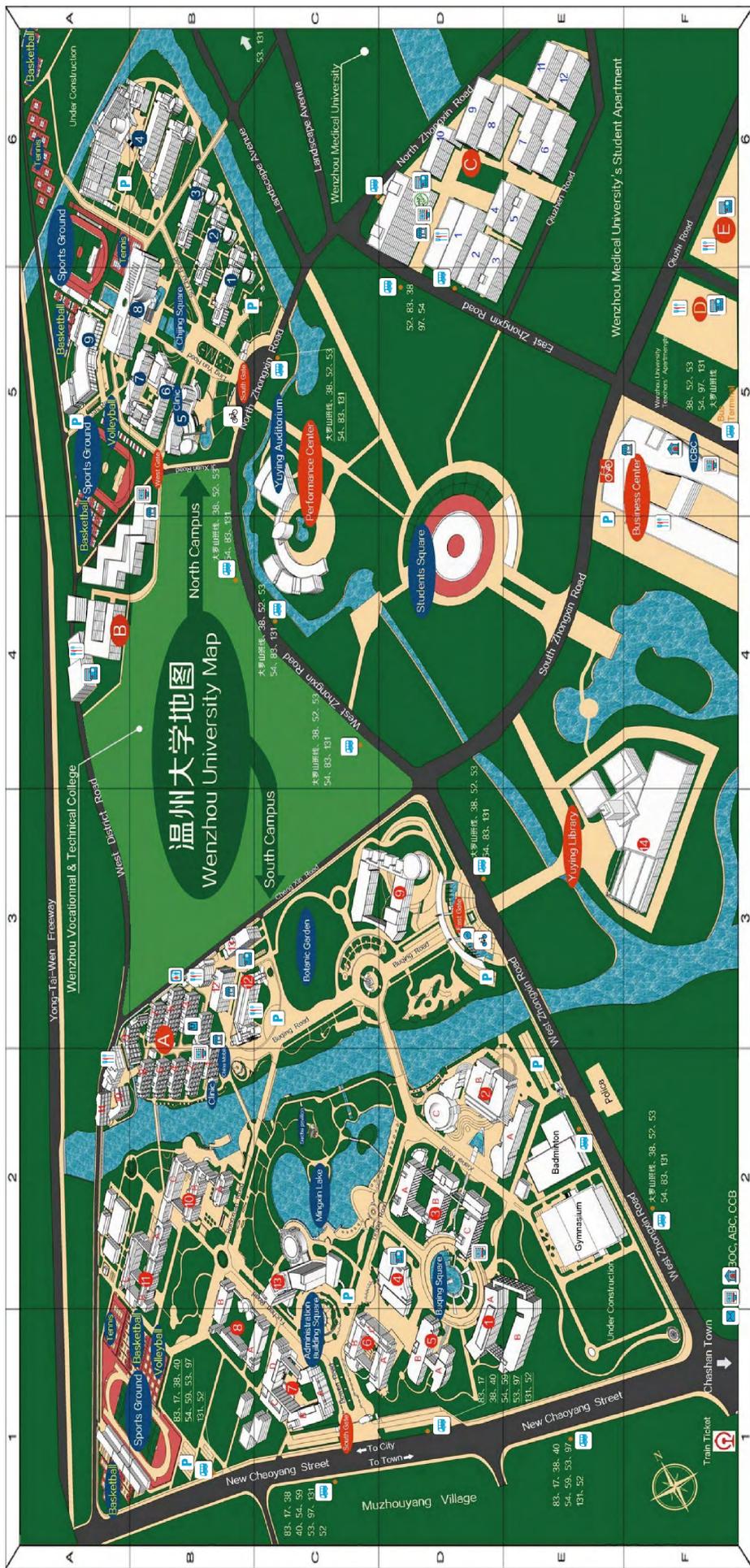


Yuying Library

Inaugurated in 1933 by Mr. Huang Suchu, a renowned industrialist, Wenzhou University has merged and integrated 6 schools in its development and progress. WZU is among the first batch of state-approved Chinese Language and Culture Education Base, designated by the Chinese Ministry of Education (MOE) to accept Chinese Government Scholarship students, and is authorized to accept overseas Chinese students and students from Hong Kong, Macau and Taiwan. Overseas students applying to study at WZU can apply for Chinese Government Scholarship, International Chinese Language Teachers Scholarship, Zhejiang Provincial Government Scholarship, and WZU Presidential Scholarships.

Its academic programs cover 9 discipline areas including Literature, Science, Engineering, Law, Education, Economics, History, Management and Art. It offers 46 postgraduate programs (including doctorate program in Chemistry), and 57 undergraduate programs. The number of full-time faculty and staff is about 2000. It has about 14,000 undergraduates, 1,500 postgraduates, 900 international students and around 13,000 part-time students annually for continuing education.

The university has always attached great importance to international students' education and all the undergraduate programs and postgraduate programs are open to international students. Considering the limited Chinese language ability of some international applicants, WZU offers courses taught exclusively in English at both the undergraduate and postgraduate levels. These special programs offer rich opportunities for international students to acquire highly specialized knowledge while gaining a better understanding of the Chinese language and culture.



## Welcome to Wenzhou University

We invite you to stroll about our picturesque campuses with beautiful mountain views and relaxing walkways. If you have questions or need assistance, please feel free to ask anyone on campus. Whatever the reason for your visit, we hope you enjoy your stay!



## Library & Administration

- 10 Yuying Library F3
- 18 Administration Building C2
- International Relations(#602)
- Finance(#209,311)
- Student Affairs
- Teaching Affairs
- Postgraduate Affairs
- Technical Assistance
- University Police(7x24 help line:866896110)
- University History Museum
- Hair Embroidery Museum
- Folklore Museum B5
- Campus Card D2,B3,A4,D6,F5,F6
- City College B1
- 4 Cuijiang College B6

## Colleges & Venues

- 8 School of Business B5
- 7 College of Architecture & Civil Engineering C1
- 1 College of Chemistry & Materials Engineering B2
- 2 College of Fine Arts and Design D2
- 7 School of Foreign Studies B5
- 1 College of Humanities B5
- 3 College of International Education B6
- 2 College of Law and Political Science B6
- 10 College of Life & Environmental Science B2
- 2 College of physical Education A5
- 1 College of Computer Science and Artificial Intelligence D1
- 5 College of Mathematics & Information Science D2
- 6 College of Marxism B5
- 6 College of Mechanical & Electrical Engineering C1
- 6 College of Music B5
- 9 College of Teacher Education D3

## Residence & Canteens

- A Buding Community B3
- Clinic (South Campus)(2nd floor)
- Clinic Post Mailbox
- China Mobile
- Suchu Community D6
- Chaohao Community F6
- Expert Building (Zhuan Jia Lou) B3
- International Student Residence



Tel: +86-577-86680971

Web: <http://cic.wzu.edu.cn/>

E-mail: [admission@wzu.edu.cn](mailto:admission@wzu.edu.cn)

Application: <http://study.wzu.edu.cn>

# ABOUT WENZHOU



Wenzhou is known as Ouyue in ancient times. As early as five or six thousand years ago, people have settled here. It was upgraded from a prefecture to a state in the Tang Dynasty. Due to its warm climate and “being warm in the middle of the winter”, it was given the name of Wenzhou—a “Warm State”. It was established as Wenzhou City in 1949.



Jiangxin Island

Situated in the Southeast of Zhejiang Province, Wenzhou adjoins to Fujian Province in the south. Enjoying a coastline of 355 kilometers and located at the intersection of Yangtze Delta and Pearl River Delta economic zones, it is the economic, cultural, and transportation center of Southern Zhejiang Province. With a total population of 7,388,100, Wenzhou administers three districts-Lucheng District, Longwan District, and Ouhai District, two cities-Ruian City and Yueqing City, and six counties-Dongtou, Yongjia, Pingyang, Cangnan, Wencheng, and Taishun. “The scenery of East Ou is the best in Jiangnan-the regions in south of Yangtze River”. Wenzhou enjoys abundant tourism resources, including Yandang Mountain, Nanxi River, and Baizhangji Waterfall national level scenic spots as well as Nanjishan Islands and Wuyanling national level nature reserves. Basked in Wu-Yue culture and Fujian culture, Wenzhou people have been endowed with an open, tolerant, bold personality. Economist Zhong Pengrong used to summarize “Wenzhou spirit” into following four sentences: the pioneering spirit of starting from scratch and working hard; the independent spirit of non-reliance and being self-dependent; the exploratory spirit of making their homes wherever they are; and the creative spirit of daring to innovate.



Yinxiang Nantang

Wenzhou, as one of the earliest frontiers of China's Opening-up and Reform Policy, enjoys highly developed commercial business. Almost every household in Wenzhou does some kind of business. Companies opened by Wenzhou people have spread all over the world, and Wenzhou people are known for their shrewdness in business. Recently, we have also watched a variety of TV programs featuring Wenzhou merchants, including “Two Wenzhou Families” and “Legend of Entrepreneurship”.



University Student Activity Center

## GEOGRAPHICAL LOCATION

Situated in the Southeast of Zhejiang Province, Wenzhou adjoins to Fujian Province in the south. Enjoying a coastline of 355 kilometers and located at the intersection of Yangtze Delta and Pearl River Delta economic zones, it is the economic, cultural, and transportation center of Southern Zhejiang Province. With a total population of 7,388,100, Wenzhou administers three districts-Lucheng District, Longwan District, and Ouhai District, two cities-Ruian City and Yueqing City, and six counties-Dongtou, Yongjia, Pingyang, Cangnan, Wencheng, and Taishun.

文学  
法律  
历史

科学  
教育  
管理

工程  
经济  
艺术

# COLLEGES AND PROGRAMS

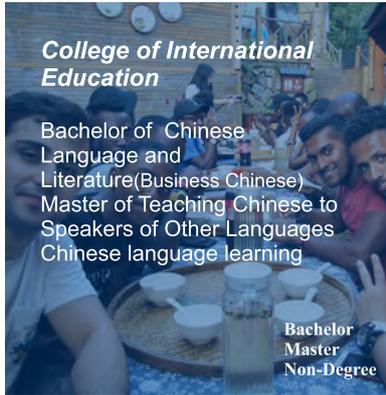


**College of Architecture & Civil Engineering**

Bachelor of Civil Engineering  
Master of Civil and Hydraulic Engineering

温州大学  
WENZHOU UNIVERSITY  
温州大学土木专业2017级留

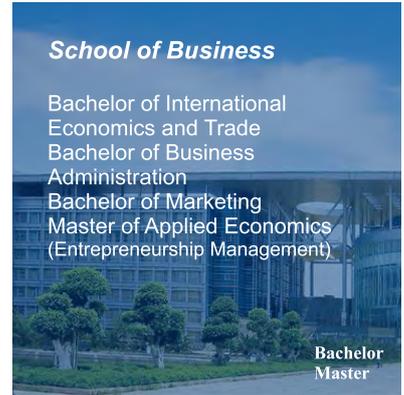
Bachelor  
Master



**College of International Education**

Bachelor of Chinese Language and Literature(Business Chinese)  
Master of Teaching Chinese to Speakers of Other Languages  
Chinese language learning

Bachelor  
Master  
Non-Degree



**School of Business**

Bachelor of International Economics and Trade  
Bachelor of Business Administration  
Bachelor of Marketing  
Master of Applied Economics (Entrepreneurship Management)

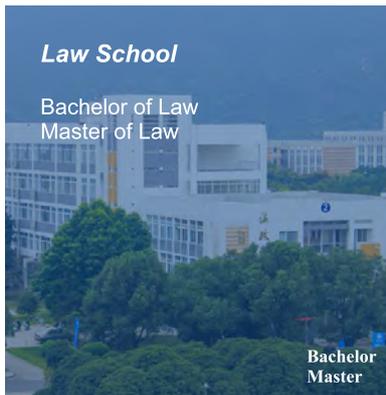
Bachelor  
Master



**College of Computer Science & Artificial Intelligence**

Bachelor of Computer Science and Technology  
Master of Computer Science and Technology

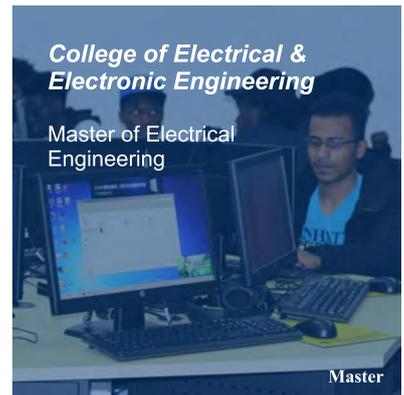
Bachelor  
Master



**Law School**

Bachelor of Law  
Master of Law

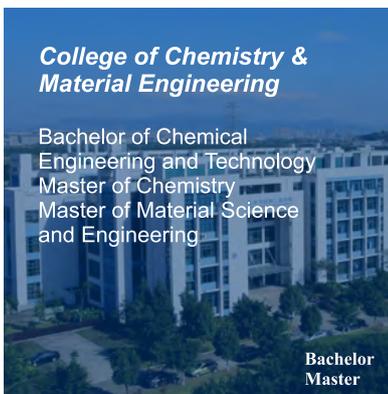
Bachelor  
Master



**College of Electrical & Electronic Engineering**

Master of Electrical Engineering

Master



**College of Chemistry & Material Engineering**

Bachelor of Chemical Engineering and Technology  
Master of Chemistry  
Master of Material Science and Engineering

Bachelor  
Master



**International Science and Technology Cooperation Base for Laser Processing (ISTCB-LPR)**

Master of Mechanical Engineering

Master



**College of Life & Environmental Science**

Bachelor of Biotechnology

Bachelor



## TUITION AND FEES

<b>Bachelors</b>	Liberal Arts : RMB 18,000 / Year
	Science & Engineering : RMB 20,000 / Year
<b>Masters</b>	Liberal Arts : RMB 20,000 / Year
	Science & Engineering : RMB 22,000 / Year
<b>Language Program</b>	One Semester: RMB 7,000; One Year: RMB 12,000
<b>Application Fee</b>	Degree Program: RMB 800/Person
	Non-degree Program: RMB 400/Person
<b>Insurance Fee</b>	RMB 800 / Year
<b>Residence Permit</b>	RMB 800 / Year
<b>Accommodation Fee</b>	RMB 2,900-4,000 / Year
<b>Physical Examination</b>	Around RMB 400/Person



## Entry Requirements

1. Non-Chinese citizens with a valid passport
2. High school graduate or equivalent to a Chinese high school graduate (Bachelor Degree Applicant)
3. University graduate or equivalent to a Chinese University graduate (Master Degree Applicant)
4. Be in good health condition and above the age of 18



## Application Materials

1. Graduation certificate of highest education level attained.  
\*Graduation certificate should be in Chinese or English. If not, it should be translated into Chinese or English and be notarized.
2. An official transcript from the college you have recently attended.  
\* Official transcript should be in Chinese or English. If not, it should be translated into Chinese or English and be notarized.
3. Study plan and Two Recommendation letters (only for Master applicant)
4. Certificate of English proficiency test  
\*IELTS or TOEFL will only be required if the applicant is not a native English speaker (A minimum score should be obtained as follows: IELTS 6.0, TOEFL iBT 70, or TOEFL paper based 550)
5. Applicants to Chinese programs must pass HSK grade 5 or above;
6. A photocopy of your passport.
7. Bank statement (normally the balance is enough for your first year tuition fee and accommodation fee )
8. No Criminal Report (if necessary)
9. Health report ( within the period of validity)

**\*Students who are now studying in China should offer the following additional documents:**

1. An agreement of transferring universities from the Office for International Students showing at which school or university you are studying now (must have common seal) and a recommendation letter from a teacher at your former school or university. Resident permits: We will help students to renew these when they register at the University and will not process renewals before the registration date.
2. Photocopy of your visa and residence permit in China.



## Contact Us

Tel: +86-577-86680971

Web: <http://cic.wzu.edu.cn/>

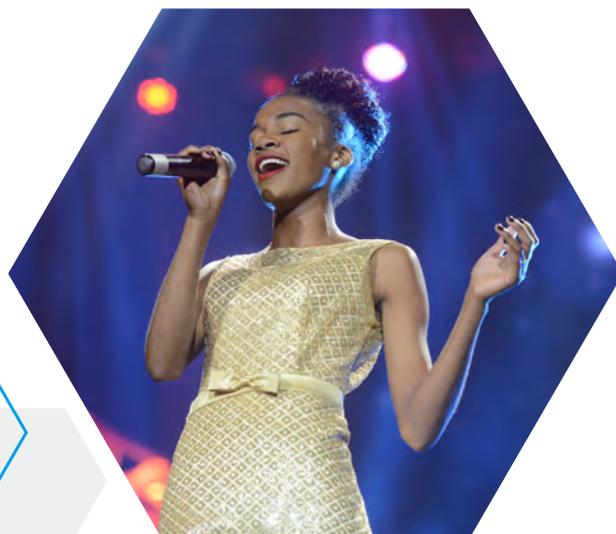
E-mail: [admission@wzu.edu.cn](mailto:admission@wzu.edu.cn)

Application: <http://study.wzu.edu.cn>

# 校园生活 CAMPUS LIFE



真人CS户外活动  
Live CS Outdoor Activities



温州大学新年晚会学生会献唱  
Singing at the New Year Gala



开学典礼新生致词  
The Freshman Addressing in  
Opening Ceremony



迎新春、写春联  
Writing Spring Festival couplets to  
welcome the Spring Festival



国际文化周汉服表演  
Han Dynasty Clothing  
Performance in  
International Culture  
Week



颁发国际学生毕业典礼  
International Student Graduation Ceremony



# CHEMICAL ENGINEERING AND TECHNOLOGY

## PROFILE

The information below is intended to provide an example of what you will study. Most degrees are divided into stages. Each stage lasts for one academic year, and you'll complete modules totaling 130 credits by the end of four stages. Our teaching is informed by research, and course content changes periodically to reflect developments in the discipline, the requirements of external bodies and partners, student feedback, or numbers of students interested in an optional module. In your first year, you'll cover the core principles of engineering, maths, and science, including General Chemistry, Basic Computer Applications, The Basics of Programming, University Physics, Advance Maths.

Your Stage 2 modules will expand on Stage 1, developing existing skills and knowledge while introducing further areas such as Polymer Chemistry, Polymer Physics, Inorganic Chemistry, Organic Chemistry, Analytical Chemistry, Physical Chemistry.

In Stage 3, you'll further develop skills and knowledge while introducing special professional areas such as Chemical Reaction Engineering, chemical engineering software, Separation Science, Fundamentals of Materials Science and Engineering, Introduction to the Physics and Chemistry of Materials, Technology of Leather-making, and more.

In Stage 4, You'll also work on a team project, which will be presented to a panel of sector experts. you will complete a substantial research project and choose modules in advanced chemical engineering from across our specialities, including chemical processing, process control, and sustainable engineering and more.

## EDUCATION OBJECTIVES

Chemical engineers play a crucial role in many aspects of our everyday lives. This degree will equip you with the knowledge and practical skills you need to contribute to future scientific and technological breakthroughs within the diverse sector. Practical learning and industry placements are integrated throughout the degree, giving you the opportunity to put your learning into practice, develop your professional expertise, and gain invaluable real-life experience in the sector. You'll gain expertise across a broad range of chemical engineering topics, including thermodynamics, chemical reaction engineering, and process control.

## DURATION

4 years

## JOB PROSPECTS

With a Chemical Engineering degree, you'll be highly employable, and possess many of the most desirable transferable skills such as problem solving and innovation. Most of our graduates were in work or further study within six months of graduating. Many of our graduates go on to work for high-profile employers within sectors such as pharmaceuticals, chemicals, energy, oil and gas, environment, and biotechnology.

Recent graduates have taken up roles including chemical engineer, energy marketing and trading analyst, graduate engineer, process engineer, and technology risk associate within many companies.

## CORE COURSES

All lectures or courses are conducted in English. The core courses include Introductory Classical Thermodynamics, General Chemistry, Inorganic Chemistry, Organic Chemistry, Analytical Chemistry, Physical Chemistry, Fundamentals of Materials Chemistry, Polymer Chemistry, Polymer Physics, Fundamentals of Biochemistry, Advanced Experiments in Chemistry, Unit Operations etc.

### Course Title Chemical Engineering Thermodynamics

#### Course Description

Chemical Engineering Thermodynamics refers to a branch of chemical engineering, which is a discipline formed by the application of basic laws of thermodynamics in the field of chemical engineering. This course mainly studies the law of mutual transformation between various forms of energy in chemical engineering and limit conditions of process approaching equilibrium, providing theoretical basis for effective use of energy and improvement of practical process. The most fundamental task of chemical thermodynamics is to use the first and second laws of thermodynamics to give the maximum utilization limit of matter and energy, effectively reduce production energy consumption, reduce pollution, so as to guide how to slow down the increase of entropy in essence. At the same time, chemical thermodynamics is also a course to train logical thinking and deductive ability. Deductive method is the basic scientific method of chemical thermodynamics theory system, which is mainly carried out by mathematical method, which determines that the mathematical formula of chemical thermodynamics is complicated and the theoretical concept is rigorous and abstract.

### Course Title Principles of Chemical Engineering

#### Course Description

Principle of chemical engineering is a technical basic course about chemical processing process, which provides scientific basis for process industry (including chemical industry, light industry, medicine, food, environment, material, metallurgy and other industrial sectors), and supports the development of chemical industry and similar disciplines. The course of Chemical Principle mainly studies the basic principle of unit operation in chemical production and the design, operation and adjustment of equipment. With the principle of transmission process and research methodology as the main line, it studies the basic laws of each physical processing process, the design method of typical equipment, and the operation and adjustment principle of process.

### Course Title Analytical Chemistry

#### Course Description

Analytical chemistry is a basic course for chemistry majors in colleges and universities. It is the study of the chemical composition and structure of the chemical analysis methods and related theories, always considered an "eye" of scientific research and industrial and agricultural production. The course is organized in a weekly pattern of one or two lectures paired with one seminar. The content includes 16 chapters: 0-2. Introduction; 3. Experimental Error; 4. Statistics; 5. Quality Assurance and Calibration Methods; 6. Chemical Equilibrium; 7. Let the Titrations Begin; 8. Activity and the systematic treatment of equilibrium; 9-10. Monoprotic acid-base equilibria; 11. Acid-Base Titrations; 12. EDTA Titrations; 14. Fundamentals of Electrochemistry; 16. Redox Titrations.

### Course Title Inorganic Chemistry

#### Course Description

Inorganic chemistry is one of the most important courses for college students. The course focuses on the study of synthesis, reactions, structures and properties of compounds of the elements. In this semester, sixteen lectures will be given, which will cover elements from group 1, group 2 and group 13 to group 18. The course will also introduce the basic chemistry of metals in d-block. In each chapter, the crystal structures and the physical and chemical properties of each element, its hydride, oxide and oxoacid will be comprehensively discussed.

# LAW

## (International Economic Law)



### PROFILE

The undergraduate program in the Law School at WZU is specially designed for international students who have an interest in financial, business, and commercial law in an international context. The program provides students the opportunity to explore the international economic legal system and to prepare for further and deeper study in international economic law or to practice international business law. Through a series of intensive courses, students develop their own intellectual toolbox for future careers in the era of economic globalization.

### COURSE

LLB at WZU Law is a four-year degree program. In the first two years (Freshman), we ensure that the balance is appropriately divided between Chinese language and basic law courses, which is achieved through the unique Chinese language courses and Chinese culture courses, including Advanced Chinese, Chinese Writing, Chinese Viewing, Listening & Speaking, Chinese Culture and Practice, as well as all the foundation courses of law. In the third and fourth years, students focus on the study of International Economic Law. This progression provides our graduates with the advantages of early specialization and a solid foundation in their academic career.

### DURATION

4 years

### STRUCTURE OF CURRICULUM

Chinese Language Modules: Comprehensive Chinese; Chinese Listening and Speaking; Advanced Chinese; Chinese Writing; HSK Training Chinese Culture Modules: Survey of China; Chinese Kung Fu; Chinese Traditional Music; Chinese Culture and Practice (Chinese Painting, Paper-cut, Calligraphy, Weave) Legal Basis Modules: Legal English; Principles of Law International Economic Law Modules: Chinese Business Law; International Business Transaction; International Investment Law & Arbitration; International Financial Law; International Trade and Human Rights

## CORE COURSES

### Course Title International Economic Law

#### Course Description

The course of Introduction to Jurisprudence aims to guide students to understand and use legal sense in their studies and practice by introducing basic concepts, basic knowledge and basic principles of jurisprudence. This course is designed to familiarize international students with the fundamental knowledge of the science of law as well as the basic situation of legal construction in China, helping students to know the question of “what the law is?”, in order to lay the foundation for their following study on specific laws and other subjects.

### Course Title International Commercial Arbitration

#### Course Description

This course enables students to have a general understanding of the legal concepts and the basic legal system of international commercial arbitration, including (1) An Overview of International Arbitration; (2) Agreement to Arbitrate; (3) Applicable Laws; (4) Establishment and Organisation of an Arbitral Tribunal; (5) Powers, Duties, and Jurisdiction of an Arbitral Tribunal; (6) Conduct of the Proceedings; (7) Role of National Courts during the Proceedings; (8) Arbitration under Investment Treaties; (9) Award; (10) Challenge of Arbitral Awards; (11) Recognition and Enforcement of Arbitral Awards. The case study enables the students to put the knowledge of international commercial arbitration into practice and resolve specific problems they may encounter in foreign-related civil and commercial dispute resolution.

### Course Title Conflict of Laws

#### Course Description

Problems arising when litigation occurs in more than one forum or when one or more fact element in a case occur in a jurisdiction other than the forum. More particularly, the course includes a study of the problems of recognition and enforcement of foreign judgements (state and nation) and choice-of-law problems in torts, contracts, property, family law, administration of estates, and business associations.

### Course Title Principles of Civil Law

#### Course Description

This course is compulsory for all law students, aiming at familiarizing students with civil law and its basic theories for a preliminary understanding of the basic framework of civil law to lay a solid foundation for the study of other law course by training them in theoretical and logical thinking and improving their ability to practice law. It mainly introduces civil law as the core of administration of justice, person (natural person and legal person), the basic principles of civil law, legal relationship, legal transaction, agency and limitation.

### Course Title Public International Law

#### Course Description

This course consists of two parts. The first part deals with the basic principles of Public International Law, including the concept, history, sources and codification of international law. It also introduces the rights and obligations of states, principles of international law, the recognition of states and government succession, the responsibility of states and other international legal subjects. The second part deals with different areas of international law and their related rules such as territory and non-territory issues, the law of the sea, air law, and outer space law, individuals and human rights, diplomatic relations, the law of treaties, international organizations, the peaceful settlement of international disputes, the international judicial system and the law of war.

### Course Title Constitutional

#### Course Description

As a compulsory course for law undergraduates, this course introduces the basic principles and historical development of Constitutional Law, the fundamental rights and duties of citizens, the state structure and forms of government, the electoral system, the national flag, anthem and emblem.



# BIOTECHNOLOGY



## PROFILE

Biotechnology is the area of biology that involves using living systems and organisms to develop or produce products or the technological application of such systems or organisms. Depending on the tools and applications, it often overlaps with the (related) fields of molecular biology, bioengineering, biomedical engineering, biomanufacturing, molecular engineering, and more. For thousands of years, humankind has used biotechnology in agriculture, food production, and medicine. In the late 20th and early 21st centuries, biotechnology has expanded to include new and diverse sciences such as genomics, recombinant gene techniques, applied immunology, and development of pharmaceutical therapies and diagnostic testing.

## EDUCATION OBJECTIVES

To respond to the ever-increasing demand for well-trained international biotechnology professionals, our undergraduates are trained to possess solid theoretical knowledge of biology and experimental skills, modern biotechnology knowledge and skills, strong biotechnology research and development capabilities, and practical application abilities. Our undergraduates gain an international perspective by communicating and cooperating with international teams. The goal of this program is to cultivate teams comprising international professional and technical staff who are capable of performing high-caliber research and development in science and technology, technology development, and international trade and enterprise management in the field of biotechnology and its related disciplines.

### PRACTICAL TEACHING

Scientific Research Training,  
International Communication,  
Professional Practice, Dissertation

### DURATION

4-years undergraduate program with  
a flexible system of three to six  
years; Bachelor of Science

### JOB PROSPECTS

Biological production, Inspection  
and Quarantine Technology,  
Biological Safety, Biotechnology,  
Pharmaceuticals

## CORE COURSES

**Course Title** Microbiology  
**Instructor** Qiongzen CHEN

### Course Description

The science of microbiology is all about microorganisms and how they work, especially the bacteria, a very large group of very small cells that have enormous basic and practical importance. Microbiology is also about diversity and evolution of microbial cells, about how different kinds of microorganisms arose and why. Microbiology embraces ecology, so it is also about where microorganisms live on Earth, how they associate and cooperate with each other, and what they do in the world at large, in soils and waters and in animals and plants. Microbiology encompasses numerous sub-disciplines including virology, parasitology, mycology, and bacteriology. The science of microbiology revolves around two interconnected themes: (1) Understanding the nature and functioning of the microbial world, and (2) applying our understanding of microbial world for the benefit of humankind and planet Earth. As a basic biological science, microbiology uses microbial cells to probe the fundamental processes of life. In so doing, microbiologists have developed a sophisticated understanding of the chemical and physical basis of life and have learned that all cells share much in common. As an applied biological science, microbiology is at the forefront of many important breakthroughs in human and veterinary medicine, agriculture, and industry.

*Calculus, Physics, Inorganic and Analytical Chemistry, Organic Chemistry, Instrumental Analysis, Biostatistics, Plant Biology, AI Biology, Biochemistry, Cell Biology, Microbiology, Genetics, Molecular Biology, Genetic Engineering Principles and Techniques, Fermentation Engineering Technology, Biological Separation Principle and Technology, Bioinformatics, Immunology Principle and Technology, Cell Engineering, Enzyme Engineering.*

**Course Title** Biochemistry  
**Instructor** Alan Chang

### Course Description

Biochemistry is mainly concerned with metabolism. One of the great unifying principles of modern biology is that organisms show marked similarity in their major pathways of metabolism, and this highlights the fact that all life has descended from a common ancestral form. For example, glycolysis, the metabolic pathway by which energy is released from glucose and captured in the form of ATP under anaerobic conditions, is common to almost every cell. It is believed to be the most ancient of metabolic pathways, having arisen prior to the appearance of oxygen in abundance in the atmosphere. The subject covers different pathways, ranging from the extraction of carbon and their simulation into organic compounds by a photosynthetic organism such as plants to the burning of glucose fuel for energy, degradation and removal of nitrogenous wastes and the synthesis of complex organic compounds such as carbohydrate and lipids by animals and human.

**Course Title** Cell biology  
**Instructor** Peichao CHEN

### Course Description

Cell biology is the study of cells and how they function, from the subcellular processes which keep them functioning, to the way that cells interact with other cells. Cell biology concerns itself with how different molecules are used by the cell to survive, reproduce, and carry out normal cell functions. Some organisms have only one cell, while others are organized into cooperative groups with huge numbers of cells. On the whole, cell biology focuses on the structure and function of a cell, from the most general properties shared by all cells, to the unique, highly intricate functions particular to specialized cells. An understanding of cells is therefore vital in any understanding of life itself.

The subject offered consists of a series of lectures that focuses on eukaryotic cells, with greater emphasis on animal cells. The topics covered included cell structures and organelles, gene expression in cell growth, cell signaling and how dysfunctional regulation in cell growth can lead to cancer in humans. In addition, there will also be a practical component where you will learn some basic techniques in cell biology.

# COMPUTER SCIENCE AND TECHNOLOGY

## PROFILE

College of Computer Science and Artificial Intelligence (CS&AI) of Wenzhou University was founded in 1998. It has four departments: Computer Science and Technology, Network Engineering, Data Science and Big Data Technology, Artificial Intelligence. It has 65 full-time faculty members with 75 percent of Ph. Degree or senior professional titles. Many faculty has oversea education background and can lecture in Chinese and English. At present more than 900 Chinese undergraduates and 75 foreign students are studying for bachelor's degree and 105 graduates for master's degree.

The mission of the undergraduate program in Computer Science is to learn systematically the basic theory, basic knowledge, basic skills and methods in computer theory, computer programming and software designing, including developing students' ability to apply the defining processes of computer science theory, abstraction, design, and implementation to solve problems in the discipline.



## PRACTICAL TEACHING

This major provides many course projects to consolidate the programming and designing skill. It also provides internship to get familiar with working environment and working experience. All students are required to present graduate thesis before graduation.

### DURATION

4 years

### EDUCATION OBJECTIVES

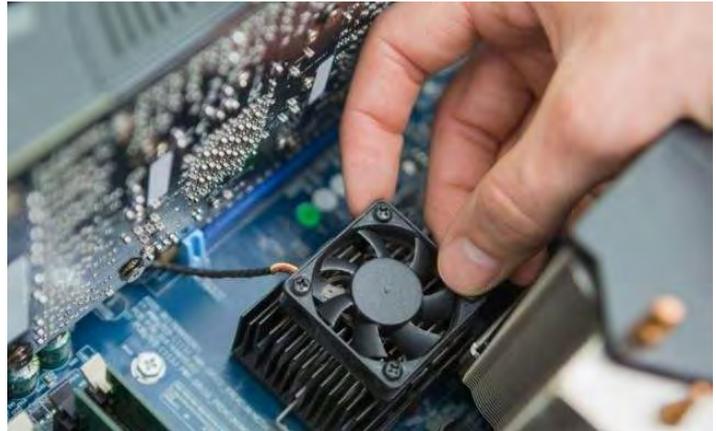
Students in Computer Science and Technology major are expected to be able to understand the basic principles and theory of computer science and can design softwares, apply independent learning and reasoning in the computing discipline, work in both independent and collaborative ways with others; relate professional and disciplinary information and ideas to diverse audiences in effective and appropriate ways, can apply in-depth knowledge and competencies in advanced areas of the computing discipline.

### JOB PROSPECTS

Software engineer and Programmer in IT company and government department. Almost half of 2020 Graduate Students get offers from famous universities for master study. all remainders get fulfilling position in China or in their own country.

## CORE COURSES

Main courses include Math, Linear Algebra, Engineering Mathematics, C Programming, Data Structures & Algorithms, Computer Network, Operating System, Principles of Database & Applications, Advanced Algorithms; Java Programming, Multimedia Technologies, Web Application Development, C++ Programming, UML & Software Modeling, Machine Learning, Mobile Development, Software Engineering, Software Testing Techniques, IT Project Management.



### **Core Course C programming** **Instructor YanDan WANG**

#### **Course Description**

Building on the fundamental of programming skills and prerequisites of other courses, this course will teach you how to set up C programming environment, e.g. what IDE you can use to code and run your program, as well as how to test and debug your program. After this course, you'll be able to write the program by first planning and design what your program should do to solve the program.

Here's the list of general contents you are going to learn: Basic syntax of C language, The decision making and loop statements, Functions, Arrays, Pointers, Struct and file writing and reading.

### **Core Course Data structure & Algorithms** **Instructor Wingo WU**

#### **Course Description**

Data structure & Algorithms is a fundamental course for Computer science major and other related major. This course provides an in-depth study of various data structures and algorithm analysis techniques. Main topics include lists, stacks, queues, binary trees, graph. It also introduces popular search and sorting algorithms. Upon completion, the students should understand most of the classical techniques on creating efficient data structures and algorithms. and will be able to apply them in follow-up courses such as Database, Software Engineering, Compiler, Operation System. It also cultivates students fundamental skills in programming and problem solving.

### **Core Course Operating System** **Instructor Chengwen WU**

#### **Course Description**

Operating systems are an essential part of any computer system. It provides a clear description of the concepts that underlie operating systems. As prerequisites, we assume that the student is familiar with basic data structures, computer organization, and a high-level language, such as C or Java. The hardware topics required for an understanding of operating systems are covered, we also include an overview of the fundamental data structures that are prevalent in most operating systems. For code examples, we use predominantly C, with some Java, but the reader can still understand the algorithms without a thorough knowledge of these languages. Concepts are presented using intuitive descriptions. Important theoretical results are covered, but formal proofs are largely omitted. The bibliographical notes at the end of each chapter contain pointers to research papers in which results were first presented and proved, as well as references to recent material for further reading. In place of proofs, figures and examples are used to suggest why we should expect the result in question to be true. The fundamental concepts and algorithms covered in the book are often based on those used in both commercial and open-source operating systems. Our aim is to present these concepts and algorithms in a general setting that is not tied to one particular operating system. However, we present a large number of examples that pertain to the most popular and the most innovative operating systems, including Linux, Microsoft Windows, Apple Mac OS X, and Solaris. We also include examples of both Android and iOS, currently the two dominant mobile operating systems. Main topics include Overview, Process management, Memory management and Storage management.

# CIVIL ENGINEERING



## PROFILE

The college of Civil Engineering and Architecture (CCEA) at WZU was founded in 1984 with two disciplines: Civil Engineering and Architecture. CCEA has 3 institutions: (a) Institution of Geotechnical Engineering, (b) Institution of Green Buildings and Structural Engineering, and (c) Institution of Architecture and Urban-Rural Region Planning.

As one of the leading colleges/schools at WZU, the CCEA features the following: (a) State Innovation Center of Tideland Reclamation and Protection of Ecosystem, (b) State Key Laboratory of Soft Soil Foundation and Tideland Reclamation, (c) Municipal Key Research Center of Building Energy-Saving/Emission-Reduction and Disaster-Mitigation (d) Laboratory Education Center.

CCEA has advanced equipment and devices for research and education, undertakes 31 national projects, thus forming state/municipal innovation teams in terms of Soft Soil Foundation and Tideland Reclamation, Green Buildings and Structure Engineering, and Disaster-Mitigation.

## DURATION

4 years

## EDUCATION OBJECTIVES

The program, provided by College of Civil Engineering and Architecture, aims to foster international students that are proficient in Chinese and English, familiar with and love Chinese culture, keen with international communication and cooperation.

## JOB PROSPECTS

The program is designed to provide students with a broad-based and high-quality interdisciplinary education in the areas of structural and geotechnical engineering and construction management as well as practical training. Our students are anticipated to become well-rounded civil engineers who are ready to work on various fields, including building design and construction, urban infrastructure construction, construction management, investment and development.

## PRACTICAL TEACHING

Practical training is provided in the following areas: civil engineering, measurement, construction methods, RC and steel structures. Through these practical exercises, students progressively become more familiar with the different aspects of civil engineering.

## CORE COURSES

### **Course Title** Advanced Concrete Structure

#### **Course Description**

This course comprehensively and systematically introduces the design and calculation theory, scientific research achievements and engineering application prospects of concrete structures. The main contents include concrete material, stress constitutive relation of concrete, bond between steel bar and concrete, design method of building structure, analysis principle of bending and compression member, analysis principle of shear member, analysis principle of torsion member, crack and deformation of concrete structure, seismic performance of reinforced concrete structure, performance of reinforced concrete structure under impact load, concrete Nonlinear analysis of truss structure and durability of concrete structure.

### **Course Title** Engineering Test and Measurement Technology

#### **Course Description**

The main contents of this course are: loading technology, measurement technology, test design, analysis and processing of test data, and inspection and evaluation of existing structures. Through the study of this course, students can fully understand the whole process of civil engineering structural test, understand the basic principles, performance and use methods of various testing instruments, cultivate students' basic test skills of structural test, make them have the ability to engage in the detection of general building structures, and lay a good theory for students to carry out field structural test and scientific research experiments.

### **Course Title** Advanced Soil Mechanics

#### **Course Description**

This course identifies the important aspects of soils which makes them different to other engineering materials, and thus introduces concepts that allow the appropriate modeling of the behavior of soils, especially pore water pressure, permeability, and the influence of void ratio on the engineering behavior of soils. These elements connected in order to show the development of soil behavioral models including Cam-clay, and Cam-clay based models. The final section of the course will show the application of basic soil mechanics methods for the purpose of solving typical engineering problems.



# INTERNATIONAL ECONOMICS AND TRADE

## PROFILE

This BSc in International Trade is heavily career-oriented and is based on strong ties to trade and industry within the international marketplace. This Business School has a commitment to being at the forefront of the current and evolving practice of business and thereby facilitates education programs that reflect the realities of the marketplace.

## JOB PROSPECTS

With the intensification of economic globalization, there are increasingly frequent economic and trade exchanges between China and other countries. Talented individuals that thrive on this program are bound to receive a lot of attention; these will be the ones that major in international economy and trade and who are familiar with international practices. They will also be proficient in foreign languages and international trade rules and will have the ability to master the knowledge and skills of trade negotiations.

According to other sources, the employment rate of international economy and trade in recent years is more than 87 percent, which makes it a major with a very high employment rate. Senior practitioners of international economics and trade can become involved in foreign trade enterprises, foreign-funded enterprises, multinational companies or enterprises with the right to operate foreign trade and other foreign economies and trade departments and much more.

The main employment directions include:

- Engaging in operation and management of domestic and foreign banks and non-bank financial institutions
- Engaging in international trade, financial investment, marketing, e-commerce, international logistics and other fields in industrial and commercial enterprises
- International Business
- Introduction to Management, Microeconomics, Macroeconomics, Introduction to Accounting and Introduction to Statistics
- International Finance, Foreign Trade Documents, Global Investments, International Finance and Risk Management

## PRACTICAL TEACHING

100 percent of courses at WZU are conducted in English. More than 20 staff members have been recruited from top universities, research institutes and companies from six countries worldwide. Many of our faculty have hands-on business experience as consultants, entrepreneurs, investors, advisors, board members, and executives.

## DURATION

4 years

## EDUCATION OBJECTIVES

The objective of the program is to educate graduates who can understand business practice and are able to apply theories and methodologies within the international business and marketing sectors. They will be able to independently and professionally perform duties related to international business and marketing within the international market place, ranging from small or medium-sized enterprises to huge international corporations.

## CORE COURSES

International Business, Introduction to Management, Microeconomics, Macroeconomics, Introduction to Accounting, Introduction to Statistics International Finance, Foreign Trade Documents, Global Investments, International Finance, Risk Management

**Course Title** International Business Correspondence  
**Instructor** Hairong WU

### Course Description

International Business Correspondence is a compulsory course for International Economics and Trade majors, aiming at cultivating advanced practical skills in students. Through text study and case analysis, students develop practical reading and writing skills necessary for conducting international trade, including correspondences for establishing business relations, inquiries, offers, counter-offers, acceptance, placing an order, making out a contract and any other letters or emails or faxes involved in the process of a contract fulfillment. Students become familiar with each stage of the international trade process based on real workplace needs, written English business documentation, business knowledge, and e-commerce elements. With students' expanded knowledge of vocabulary, professional terminology, abbreviations, sentence patterns, expressions and layout of international trade documents, the students are well-prepared for future employment.

**Course Title** Risk Management  
**Instructor** Jens BORGES

### Course Description

This course will examine the way in which business and society make an assessment of, control and transfer risk. It is designed for the student with no previous knowledge of risk management. The goal of this course is to engage students in active discovery of risk management principles. Students will be prepared to function in a business environment, developing an awareness of the challenges, the tools, and the process of designing and implementing a risk management program. This course focuses on the ways in which business- es and society assess, control, and transfer risk. This process, known as the risk management process, is becoming an increasingly important tool in the management of business and person- al financial health. An effective and efficient corporate risk management program leads to knowledge and control of costs and an improved bottom line. The risk management process involves identification of risks and associated potential costs, analysis of the causes of risk of financial loss, determination of various strategies to treat risk, selection of strategies appropriate to the goals and objectives of the business, implementation of the selected strategies, management and monitoring of results.

**Course Title** Academic Writing  
**Instructor** Haiying XU

### Course Description

Academic Writing is an important manifestation of the scientific research achievements, writing methods and norms of academic papers. Academic writing is the basic knowledge and skills students should process. It is a practice-oriented course, in which students will be instructed in finding, reading, sorting, selecting and reviewing research papers, keeping up with the latest developments as well as an overview of the research areas. Through the study of this course, students will grasp the typical characteristics of graduation thesis with the good foundation laid by the instructing of this course.

# BUSINESS ADMINISTRATION



## PROFILE

Business School has a commitment to being at the forefront of the current and evolving practice of business and thereby facilitating education programs that reflect the realities of the marketplace.

## EDUCATION OBJECTIVES

This program is to prepare graduates to have an internationalized vision and are able to apply related theories and methodologies into international business and market place and to independently and professionally perform duties related to business administration in today's global business world.

## DURATION

4 years

## JOB PROSPECTS

International Business Administration provides you knowledge about world cultures and societies, a fundamental capability of management and be capable of innovation and business start-up. This program also qualifies you for more prestigious job opportunities such as the role of an entrepreneur, or jobs in governments and multilateral organizations.

## PRACTICAL TEACHING

100% of courses at WZU are conducted in English. Approximately 90 faculty members recruited from top universities, research institutes and companies from different countries worldwide. Many of our faculty have hands-on business experience as consultants, entrepreneurs, investors, advisors, board members, and executives.

## CORE COURSES

Management, Macroeconomics, Microeconomics, Business Negotiation, Statistics, Organizational Behavior, Business Law, Multinational Enterprises and Global Management, Entrepreneurship practice of SME, Cross Border E- Commerce, Logistics and Supply Chain Management, Management Information System, and so on.



**Course Title** International Trade  
**Instructor** Lu WANG

### Course Description

International Trade is the core course for the International Business Administration Program. The main objective of this course is to enable students to understand in a systematic manner the theories and practices in international trade and to enable them to master knowledge and skills in international trade areas in today's dynamic and competitive global environment. The course mainly provides updated cases about international trade such as Trade war between China and US, does refugees really a burden for Europe countries for undergraduate students to discuss according to international trade theories.

**Course Title** Logistics and Supply Chain Management  
**Instructor** Zongqiang REN

### Course Description

Logistics and Supply chain management is the core course for the International Business Administration Program. This course entails managing the flow of goods and information through a production or distribution network to ensure that the right goods are delivered to the right place in the right quantity at the right time. The objectives of this course is to help students gain knowledge and skills of efficient procurement, production and delivery systems. This course provides cases from strategic activities, such as capacity expansion or consolidation, make/buy decisions and initiation of supplier contracts, to tactical activities, such as production, procurement and logistics planning, to, finally, operational activities, such as operations scheduling and release decisions, batch sizing and issuing of purchase orders.

**Course Title** Management Information System  
**Instructor** Ying WANG

### Course Description

Management Information System is the core course for the International Business Administration Program. The purpose of this course is to provide an understanding of the strategic use and impact of information technology in business firms. The course covers both technical and managerial aspects of MIS. A number of short business cases will be discussed in the class. These cases include Taobao in China, IT infrastructure of Facebook and 12306.cn, Xiaomi et al.

**Course Title** Entrepreneurial Practice of the SME  
**Instructor** Zongqiang REN

### Course Description

Entrepreneurial Practice of the SME is a core course designed for students in the International Business Administration Program. The fast development of globalisation requires continuous innovation, and the role of SMEs becomes increasingly critical considering the weight of their contributions to the global economy. Most SME proprietors are entrepreneurs, and the innovative behaviours of SMEs are frequently unique and context dependent. Unfortunately, our understanding about SMEs is very limited, which makes managing SMEs difficult in most cases. This course involves studies of characteristics of SMEs, SME ownership and strategy, SME marketing, SME entrepreneurship, etc. This course aims to equip entrepreneurs with the knowledge they need to be successful, stimulate innovation in SMEs, and help SMEs to compete and prosper.



# Marketing

## PROFILE

Marketing is a set of interacting business activities designed to plan, price, promote and distribute goods and services. Students in marketing major explore buyer behavior, marketing research, market segmentation, the development of products and services, pricing strategies, distribution systems, advertising and promotion and the creation of strategies to meet consumer needs and organizational goals.

## EDUCATION OBJECTIVES

The Marketing major in WZU is a four-year program with a curricular blend of general education, fundamental business knowledge (accounting, finance, management, marketing, and e-commerce), international exposure, and in-depth marketing-specific courses. The program nurtures important business skills and marketing competencies including managing marketing, analytical ability, interpersonal skills, and teamwork. Marketing students are thus prepared to perform the marketing function and activities in business enterprises.

## DURATION

4 years

## JOB PROSPECTS

Graduates with a marketing major have career opportunities in business, industry, government service, and the non-profit sector, both regionally and globally. Employment opportunities for marketing majors are significant as the marketing function exists in every type of business and organization. Major job categories include sales, retailing, product/service management, advertising and promotion, and market research. Pursuing a marketing degree in WZU provides more job prospects. A variety of Wenzhou manufacturers are establishing international branches outside China. You have the opportunities get job offers from Wenzhou manufacturers, being the leaders or sales representatives of these international branches in your own countries. You can also take the advantage to bridge the business between your home countries and China.

## PRACTICAL TEACHING

100% of courses at WZU are conducted in English. Approximately 20 faculty members recruited from top universities, research institutes and companies from different countries worldwide. Many of our faculty have hands-on business experience as consultants, entrepreneurs, investors, advisors, board members, and executives.

## CORE COURSES

Introduction to Management, Microeconomics, Macroeconomics, Statistics, Introduction to Marketing, E-commerce, Strategic Marketing, Market Research and Forecasting, International Marketing, Risk Management, Supply Chain Management, ERP, International Business Law, etc.

### **Course Title** Introduction to Marketing **Course Description**

This course is an introduction to the theory and application of marketing.

Upon completion of this course students should be able to:

- Recognize the role of marketing within the firm's decision-making process.
- Demonstrate an understanding of the processes for analyzing, segmenting, and targeting customers in both consumer and business markets.
- Express an understanding of the process of product development, brand positioning, and brand management.
- Explain the role of pricing in the firm's decision-making process and common pricing practices.
- Describe different promotional tactics (advertising, personal selling, public relations, direct marketing, and sales promotion).
- Develop an awareness of social, ethical, and international issues in marketing.

The course combines cases, discussions, and readings to provide a mix of integrating concepts and hands-on problem solving.

### **Course Title** Introduction to Statistics **Course Description**

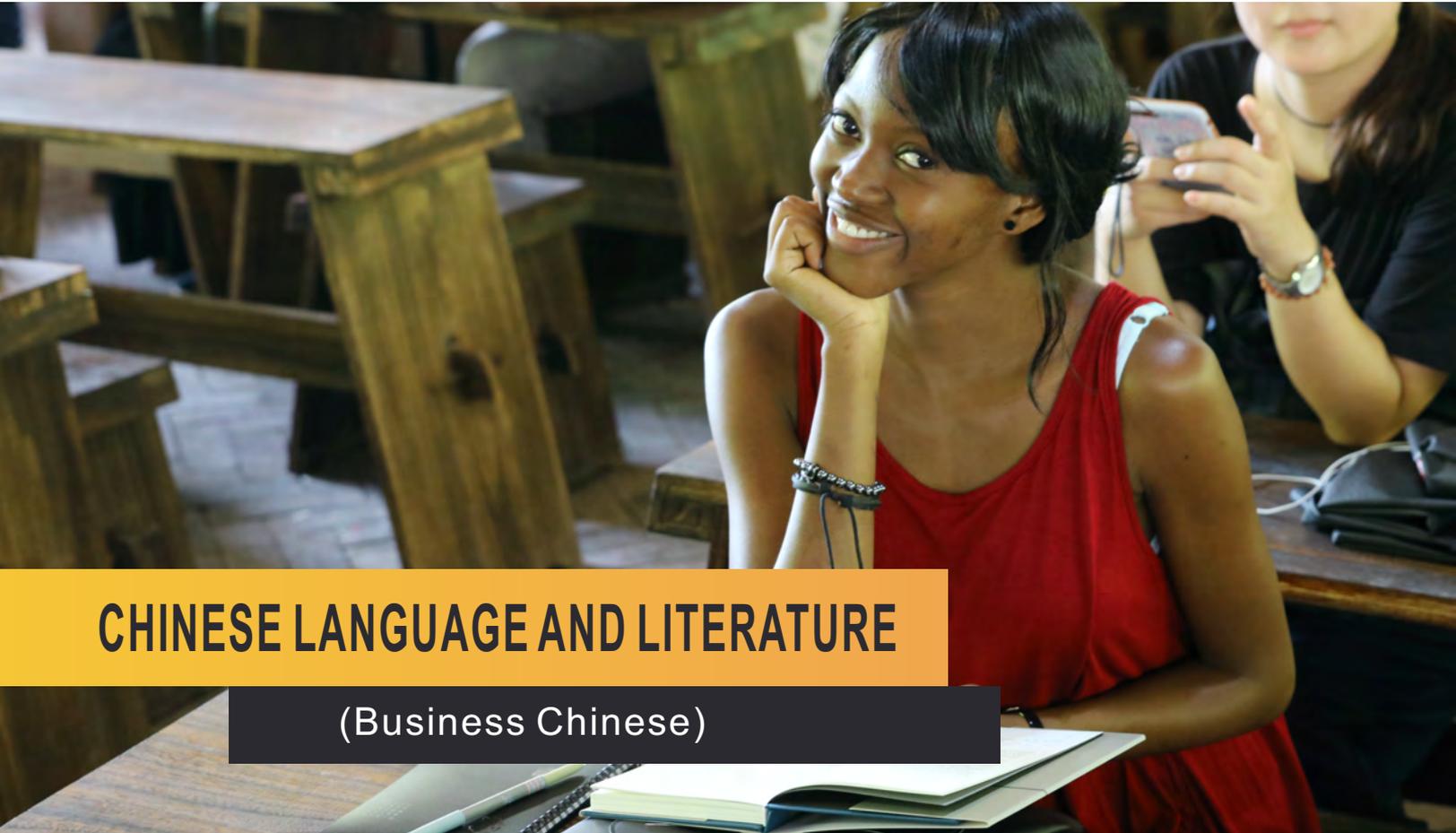
Introduction to Statistics is the core course for the Marketing Bachelor program. The course is designed to students with no previous knowledge of statistics. It mainly introduces the basic statistics idea and the commonly used statistics concept, including data collection, data visual presentation, data description, sampling statistics, confidence interval estimation, hypothesis testing, ANOVA analysis and so on. The course aims to familiarize the students with the basic functions and methods of data analysis, provide instructions for using data analysis applications, such as EXCEL, and give the students practice on applying data analysis to business. It facilitates students' future business decisions.

### **Course Title** Risk Management **Course Description**

This course will examine the way in which business and society make an assessment of, control and transfer risk. It is designed for the student with no previous knowledge of risk management. The goal of this course is to engage students in active discovery of risk management principles. Students will be prepared to function in a business environment, developing an awareness of the challenges, the tools, and the process of designing and implementing a risk management program. This course focuses on the ways in which business- es and society assess, control, and transfer risk. This process, known as the risk management process, is becoming an increasingly important tool in the management of business and person- al financial health. An effective and efficient corporate risk management program leads to knowledge and control of costs and an improved bottom line. The risk management process involves identification of risks and associated potential costs, analysis of the causes of risk of financial loss, determination of strategies to treat risk, selection of strategies appropriate to the goals and objectives of the business, implementation of the selected strategies, management and monitoring of results.

### **Course Title** International Marketing **Course Description**

International marketing is an applied course based on economic science, behavioral science and modern management. The aim of this course is to enable students to systematically master the basic theories, basic knowledge and basic methods of international marketing, so that students can understand and apply a series of marketing strategies, including the integration of corporate culture, market research, market analysis, market segmentation. A qualified marketer should make an appropriate marketing mix to meet the needs of the international market. International marketing is more diverse, complex and risky than domestic marketing. This course will help to train students to establish business marketing skills with a global perspective.



# CHINESE LANGUAGE AND LITERATURE

## (Business Chinese)

### PROFILE

This program is called Business Chinese. The main purpose is to learn Chinese for its application in business environments. The program enables students to become proficient in Chinese while providing a solid foundation in international trade to cultivate their capacity to use Chinese in professional business settings. This program includes courses about language, trade, and management. The language and major courses are taught using both English and Chinese; general courses are taught in English.

### EDUCATION OBJECTIVES

In order to be eligible for this international program, students must have at least a high school degree and speak a first language other than Chinese. Based on the educational principle that knowledge, ability, and quality are equally important, this program offers Chinese language, business, and socio-cultural courses in order to cultivate interdisciplinary talents who can apply their knowledge of Chinese in all kinds of business activities and better communicate and compete in modern global society.

### DURATION

4 years

### JOB PROSPECTS

Graduates will be capable of teaching Chinese and administering programs at universities, junior and senior high schools, tutoring institutions, and government organizations, as well as working in all kinds of international companies as secretaries, translators, salespeople, and business activity designers.

Examples:

1. Work in Chinese companies
2. Start your own business in China and do business with Chinese people
3. Work in one's home country as a representative of a Chinese company, such as the overseas offices of Bank of China
4. Work as translators for Chinese or their home country's companies
5. Work as tour guides for Chinese tourists in their home countries
6. Work as teachers of Chinese in their home countries

## CORE COURSES

Elementary Chinese Reading and Writing, Intermediate Chinese Reading, Writing and Listening, Business Speaking Chinese, Business Chinese Writing, Business Chinese Reading(intensive)

Practical Teaching: It includes cognitive training, Chinese cultural experience (calligraphy, paper cutting, Nanquan, seal-cutting), International Students Forum, practice courses of traveling/Chinese teaching/hotel internship, investigation reporting, and major-related exercitation.

**Course Title** Elementary Chinese Comprehensive I

**Instructor** Lili XU

**Course Description**

This course is set for Business Chinese major students who are not proficient in the Chinese language. The teaching method used will improve their abilities of Chinese listening, speaking, reading and writing.

Examinations: Regular grade 30% + the final grade 70% = 100 points overall rating

**Course Title** Elementary Business Chinese I

**Instructor** Ting ZHENG

**Course Description**

This course is a required course for Business Chinese major students, who have learned primary and intermediate Chinese language courses and have mastered approximately 2000 Chinese words.

Through the learning of this course, students can grasp the business vocabulary, can skillfully use business Chinese knowledge in daily life, and can complete the corresponding tasks in a business work environment.

Examinations: Regular grade 30% + quiz 20% + mid-term exam 20% + the final grade 30% = 100 points overall rating

**Course Title** Intermediate Chinese Writing I

**Instructor** Wenwen KAN

**Course Description**

This course is set for the Business Chinese major students who have completed the study of modern Chinese for one year or have mastered approximately 2000-3000 words. Through this course, students are expected to enhance their ability to write and comprehend Chinese culture better.

Examinations: Regular grade 30% + the final grade 70% = 100 points overall rating



# APPLIED ECONOMICS (ENTREPRENEURSHIP MANAGEMENT)

## PROFILE

Whether you're looking to add to your recently acquired economic or business degree, advance within your current career, change industries or start your own business, the entrepreneurship management program at the Wenzhou University School of Business is the right choice. Throughout the course, one-year dissertation and practical training, students will expand their entrepreneurship knowledge and experience to acquire the skills needed to succeed in a global economy.

## EDUCATION OBJECTIVES

This program aims to cultivate the skills needed to be an interdisciplinary talent who has international vision, a cross-culture background, solid entrepreneurial management capabilities and innovative problem-solving capabilities.

## PRACTICAL TEACHING

100% of courses at WZU are conducted in English. Approximately 90 faculty members have been recruited from top universities, research institutes and companies from various countries worldwide. Many of our teachers have hands-on business experience as consultants, entrepreneurs, investors, advisors, board members, and executives.

## DURATION

3 years

## JOB PROSPECTS

The entrepreneurship management program provides knowledge about world cultures and societies. This knowledge can be seen as a treasured skill to employers worldwide that search for experts that can successfully manage multiple markets. This program also qualifies you for more prestigious job opportunities, such as the role of an entrepreneur. It could even enable you to teach at university level, get involved in research work, or even land jobs in government and multilateral organizations.

## CORE COURSES

**Course Title** SME  
**Instructor** Zheng XU

### Course Description

SME is a core course designed for students in the Applied Economics in Entrepreneurship Management Master Program. The fast development of globalisation requires continuous innovation, and the role of SMEs becomes increasingly critical considering the weight of their contributions to the global economy. Most SME proprietors are entrepreneurs, and the innovative behaviours of SMEs are frequently unique and context dependent. Unfortunately, our understanding about SMEs is very limited, which makes managing SMEs difficult in most cases. This course involves studies of characteristics of SMEs, SME ownership and strategy, SME marketing, SME entrepreneurship, etc. This course aims to equip entrepreneurs with the knowledge they need to be successful, stimulate innovation in SMEs, and help SMEs to compete and prosper.

**Course Title** MNE and Global Management  
**Instructor** Zhan WANG

### Course Description

MNE and Global Management is a core course designed for students in the Applied Economics in Entrepreneurship Management Master Program. The main objective of this course is to enable students to understand in a systematic manner the theories and practices in international business and to enable them to conduct research in how multinational enterprises manage their global strategies and operations in today's dynamic and competitive global environment. This course discusses the external political, economic and legal environments facing multinational enterprises, focuses on strategies available to them to compete successfully in the global markets, and also covers their operational aspects such as managing global production and outsourcing. Students are required to have basic knowledge in Economics and Management before taking this course.

**Course Title** International Trade  
**Instructor** Lu WANG

### Course Description

International Trade is the core course for the Applied Economics in Entrepreneurship Management Master Program. The main objective of this course is to enable graduate students to understand in a systematic manner the theories and practices in international trade and to enable them to conduct research in international trade areas in today's dynamic and competitive global environment. The course mainly provides updated cases about international trade such as Trade war between China and US, does refugees really a burden for Europe countries for graduate students to discuss according to international trade theories. Students are required to have basic knowledge in Economics and international trade before taking this course.

**Course Title** Data Analysis  
**Instructor** Yi CHEN

### Course Description

Data Analysis is the core course for the Applied Economics in Entrepreneurship Management Master Program. The course mainly introduces the basic statistics idea and the commonly used statistics concept, including data description, sampling statistics, confidence interval estimation, hypothesis testing, ANOVA, parameter estimation and regression analysis, and so on. The course aims to familiarize the students with the functions and methods of data analysis, provide instructions for using data analysis applications, such as EXCEL or SPSS, and give the students practice on applying data analysis to business. Also, the course requires students to apply data analysis methods in academic writing by covering some academic literature.

# TEACHING CHINESE TO SPEAKERS OF OTHER LANGUAGES

(MTCSOL)



## PROFILE

We are committed to cultivating high-level, applied and dedicated professionals who can adapt to the international promotion of Chinese language and the spread of Chinese culture to the outside world in the new era; professionals that are also competent in a variety of teaching tasks. Degree holders should have high quality teaching skills, proficient Chinese as a second language, good cultural communication skills and cross-cultural communication skills. Through the perfect curriculum system, high-quality teaching content, unique research direction and diversified practice links, this major comprehensively cultivates students' awareness of the international dissemination of Chinese, as well as expanding students' knowledge of Chinese language and culture. It also promotes students' skills in teaching Chinese as a second language and improving their intercultural communication ability.

## DURATION

2.5 years

## EDUCATION OBJECTIVES

The Master's Degree of International Chinese Education is a professional degree that combines the teachings of international Chinese teachers. The main purpose is to cultivate the Chinese language skills, teaching skills and cultural and cross-cultural communication skills of high-level, internationalized and localized professionals who speak proficient Chinese as a second language. This will enable them to be competent in a variety of teaching tasks, as well as possessing the ability to adapt to international Chinese education work.

## JOB PROSPECTS

Volunteer teachers of Chinese as a foreign language, Chinese teachers in international schools, working in cultural exchanges in relevant departments, schools, press and publishing, working in cultural management and enterprises, working at institutions in China and abroad.

## PRACTICAL TEACHING

Teaching Assistants, Classroom Observation, Microteaching, Field

# CORE COURSES

Chinese Language Elements and Teaching, International Dissemination of Chinese Culture, Overview of International Chinese Education, Observation and Practice of Chinese Teaching Skills, and so on.

**Course Title** International Dissemination of Chinese Culture

**Instructor** WenWen KAN

### Course Description

This course aims to innovatively explore the forms of Chinese cultural communication. The students will study the strategies of international communication in Chinese culture within the wider concept of globalization. They will analyze the historical experiences and teachings of international communication within Chinese culture, combined with the rules of international language and culture communication. This will improve their ability to think of connotations and objectives, ways and means, problems, countermeasures and mechanisms related to international communication within Chinese culture. The relationship between communication and Chinese cultural diplomacy, cultural industry and its economic model will also be discussed throughout the course.

**Course Title** Observation and Practice of Chinese Skills Teaching

**Instructor** Lili XU

### Course Description

Due to the differences of these two professional discipline systems and the required professional quality for each, contemporary Chinese for the Major of TCSL is rather different from that of the Chinese undergraduate program, in terms of both teaching and learning. It has brought forward various demands for the teachers and the students. This class prepares the students to continue on to the contemporary Chinese course for the Major of TCSL. It does this by covering teaching goals, offering a strong content of courses, emphasizing the value of respect when teaching, methods of teaching, tests and so on.

**Course Title** Chinese Language Elements and Teaching

**Instructor** Miao YE

### Course Description

This class systematically introduces the basic theory and knowledge of Chinese as a linguistic element in second language teaching. It covers areas such as pronunciation, vocabulary, grammar and Chinese characters. By providing a large number of examples, specific teaching methods, teaching skills and problems are analyzed, meaning that all students will end the course fully informed of important subjects that should be paid attention to within the teaching practice of linguistic elements.

**Course Title** Overview of International Chinese Education

**Instructor** Hanli BAO

### Course Description

Through high quality teaching, students on this course will systematically understand the history and current situation of the development of teaching Chinese as a foreign language. They will also be able to improve their understanding of the relevant theoretical knowledge needed to teach Chinese as a foreign language, enhance their ability to apply this knowledge to teaching practice and lay a good theoretical foundation for teaching Chinese as a foreign language in the future, as well as carrying out language application research. Students on his course should already be familiar with the basics of theoretical development of foreign language teaching, as well as the development and basic theory of teaching Chinese as a foreign language. They will also have the opportunity to master basic concepts that are required to teach Chinese as a foreign language. The course aims to cultivate students' ability to discover relevant problems worthy of study and to put them into research.



# CHEMISTRY

## PROFILE

Our Chemistry Master program provides advanced training in modern chemistry. It will give you an overview of chemistry topics as practiced in modern research. You will receive specialty training in areas of organic, inorganic, physical and analytical chemistry. This course provides advanced training in modern organic and medicinal chemistry from conception to production of novel drugs. It enables you to understand and experience the way modern small molecule medicine is developing. You will gain hands-on experience.

## EDUCATION OBJECTIVES

Through this course you will achieve a high level of research competence. The research project and dissertation will provide you with training in tackling and communicating the results of a significant research problem in chemistry. You will also gain experience in relevant aspects of laboratory work. You will gain specialist knowledge and understanding through lectures, seminars and workshops. You will also have taught laboratory classes where you'll perform carefully designed and tested experiments.

# Material Science and Engineering

## PROFILE

Our Materials Design and Engineering Master program provides an understanding of the role and application of materials including polymer, inorganic materials and composite materials. It also examines the science of materials properties. Learn about materials from a science and an engineering point of view. Work in a research laboratory with other research students. Complete an industry-linked research project.

## EDUCATION OBJECTIVES

The study of materials lies across the engineering and science disciplines. This course focuses on tackling practical industrial problems through knowledge and analytical skill. The insight you develop will bridge the gap between science and engineering.

This course is suitable if you have a science or engineering background. The broad nature of this study means that our graduates go into a variety of roles in a range of industries.

## DURATION

3 years

## JOB PROSPECTS

You'll get to experience working in a research laboratory with other research students. Depending on the nature of your project, you may prepare and test specimens followed by post-test examination by many testing techniques such as electron microscopy and surface analysis techniques. Many successful graduates go on to do PhD research. Many of our graduates go on to work for high-profile employers within sectors such as pharmaceuticals, chemicals, inorganic chemistry, organic chemistry, polymer chemistry, analysis chemistry, energy, oil and gas, environment, and biotechnology. Recent graduates have taken up roles including chemical engineer, energy marketing and trading analyst, graduate engineer, process engineer, and technology risk associate within many companies.

## FACILITIES AND ENVIRONMENT

You'll have access to a great range of facilities and equipment during your time at Wenzhou University, including:

1. A state-of-the-art Pharmaceutical Chemistry Lab and Energy Materials Lab, as well as a Frontier Materials Lab and Leather-Making Lab, providing access to a range of small-scale unit operations and the latest equipment
2. A recently upgraded center of instrumental analysis laboratory
3. Modern bench-top experimental equipment and an interactive video teaching system
4. A dedicated computing suites, running specialized industry-standard computer software.

# CORE COURSES

**Course Title** Statistical Thermodynamics  
**Instructor** Jicang WANG

### Course Description

This course covers the following topics: laws of thermodynamics, heat capacities, distribution laws, partition functions, and chemical equilibrium and kinetics. We will illustrate how to extract thermodynamic information from the partition function and why statistical thermodynamics plays a vital link between quantum theory and chemical thermodynamics. (3 lecture hours a week). Tentatively, the midterm exam will cover chapters 4 to 13. Chapters 4 to 10 are about the classical thermodynamics, which have been largely discussed in 59-240 and lay the foundation for the rest of this class. Chapters 11 to 13 are about Statistical Thermodynamics.

**Course Title** Energy Materials and Chemistry  
**Instructor** Shiqiang ZHAO

### Course Description

Energy chemistry, as an important branch of chemistry, is an important scientific and technological basis for mastering the comprehensive utilization of coal, understanding non-coal mineral energy, popularizing knowledge of new and renewable energy, and achieving scientific utilization of energy and sustainable development. It uses the theory and technology of chemistry and chemical engineering to solve the problems of energy conversion, energy storage and energy transmission, so as to better serve the human economy and life. Chemical changes are accompanied by changes in energy, and the use of energy is essentially the conversion process of energy forms. Energy chemistry realizes the conversion and storage of energy directly or indirectly through chemical preparation material technology due to its chemical reaction.

**Course Title** Advanced Organic Chemistry  
**Instructor** Yuanzhi XIA

### Course Description

Advanced organic chemistry is to further discuss the structure theory and reaction mechanism of organic matter on the basis of basic organic chemistry, and theoretically study the structure and reaction process of organic matter at a higher level. The structure, reaction, mechanism and their relationship of organic compounds are discussed emphatically. By discussing the principle, rule, characteristic and application of organic reaction, and introducing the design method and selection principle of organic synthesis process route, the students can improve their ability to analyze and solve practical problems, and lay a solid knowledge foundation for their future work or further study.

**Course Title** Scientific Paper Writing  
**Instructor** Shiqiang ZHAO

### Course Description

The educational concept of this course is to take the students as the center and improve students' ability of combining theory with practical application. Therefore, the following training objectives are set: 1. Let students understand the writing methods and norms of chemical papers. 2. Apply the theory learned to practice and improve the quality of paper writing by reviewing and analyzing the paper. 3. Improve students' knowledge application ability by consulting materials and defending courses.



# LAW

## (International Law)

### PROFILE

The master degree program entitled International Law is designed for overseas students with interests in financial, investment, business, and commercial law in a transnational context. Through intensive coursework, students develop an intellectual toolbox for future careers in an age of economic globalization.

### EDUCATION OBJECTIVES

The master degree program focuses on international law as well as transnational litigation and international arbitration. The degree program provides considerable scope for specialization, but also ensures that students see a wider context so as to allow them to be prepared to craft innovative solutions and think imaginatively about issues and challenges arising in an international business context.

### PRACTICAL TEACHING

The master program will help students develop the ability of drafting of arbitration agreements, appointment and challenge of arbitrators, attending preliminary and evidentiary hearings. Also, written advocacy in international arbitration will be provided. We will provide students opportunities to put the newly acquired knowledge from the first section into practice.

### JOB PROSPECTS

The master degree program will train students to seek for the position as advisers to governments, international organizations or NGOs, or experts on the multi-jurisdictional and global regulation of trade in goods, investment.

### DURATION

3 years

# CORE COURSES

Commercial Sales Law: Domestic and International, International Litigation and Arbitration, International Investment Law and Arbitration, International Criminal Law

**Course Title** Domestic and International  
**Instructor** Yiyao ZHOU

## Course Description

This course examines the law governing the domestic and international sale of goods as regulated by PRC Contract Law and the UN Convention on Contracts for the International Sale of Goods ("CISG"). The course will emphasize the use of statutory default rules to define the commercial relationship and to allocate commercial risks. Specific topics include acceptance and rejection of goods, contract interpretation in business transactions, formation of contract issues, including the issue of battle of forms, warranty liability, damage rules, risk of loss, and commercial impracticability. During this course, the solutions provided by the PRC Contract Law and the CISG will be compared. The course will also deal with contracts concluded via electronic means and will, to some extent, also examine consumer transactions.

**Course Title** International Investment Law and Arbitration  
**Instructor** Xinhao MIAO

## Course Description

This course will deal with both the substance of international investment law and the modern regime of international investment treaty arbitration. We will first examine the evolution of investor protection from custom to an institutionalized legal regime governed by multiple international instruments, including the ICSID and New York Conventions. We will then consider the substantive protections for foreign investors that are frequently found in bilateral investment treaties and similar instruments- including provisions on expropriation, fair and equitable treatment, full protection and security, and national treatment, as well as various exceptions or limitations on these obligations, particularly related to national security and other vital public policy interests. We will also examine the arbitration process, including jurisdictional issues, the structure of arbitration proceedings, the role of arbitrators and counsel, the relationship between contract and treaty claims, provisional measures, and enforcement of awards.

**Course Title** International Litigation and Arbitration  
**Instructor** Chuanfang ZHANG

## Course Description

The course explores, in a litigation context, current developments in private international law, cross-border jurisdiction, international arbitration, foreign sovereign immunity, and human rights from both a Chinese and comparative perspective. The first part of the course involves the traditional reading and discussion of cases and other materials covering important issues involved in transnational litigation, including jurisdiction to prescribe, judicial jurisdiction of courts, international arbitration, recognition and enforcement of judgments, litigation against foreign governments, human rights, and transnational discovery. The last five weeks of the course consist of simulations that involve student submission of briefs and oral arguments of actual cases designed for the course.

**Course Title** International Criminal Law  
**Instructor** Zhiou WU

## Course Description

This course consists of four sections. First, we will begin with a general introduction to the historical evolution of international criminal law over time, including a discussion of the development of the four primary crimes of "international concern" war crimes, crimes of aggression, crimes against humanity, and genocide. Second, we will focus on a number of Chinese domestic statutes that criminalize international conduct. These will include laws covering foreign bribery, antitrust and securities violations, and money laundering, piracy, terrorism, torture, and human trafficking. Third, we will examine the application of the Chinese Constitution and Chinese rules of criminal procedure to international criminal cases. Fourth, towards the end of the semester, we will examine more closely the evolution of international tribunals to prosecute crimes of "international concern" and learn more about the elements

# COMPUTER SCIENCE AND TECHNOLOGY



## PROFILE

This discipline was developed in 2006. In 2011, we had the right to grant the master's degree in computer application and technology. In the 2020 ARWU rankings, this discipline ranks nationwide among the top 32% (91st), which is a significant improvement compared to the top 50% (C+, 132nd) in the fourth round of discipline evaluation in 2016, has high qualities in research. Besides, there are one Changjiang scholars, one Chinese academy of sciences hundred talents program, one national excellent youth program, one provincial ten thousand talents program, and provincial thousand talents program. We carry out some fundamental research, application development and scientific and technological achievements transformation to improve both the discipline development and local service simultaneously. In recent four years, in the discipline ESI rankings, the potential threshold has reached 0.59, and the university has become one of the disciplines with the most potential to enter the ESI 's top 1% of global.

## DURATION

3 years

## PRACTICAL TEACHING

This major provides many course projects to consolidate the programming and designing skill. It also provides internship to get familiar with working environment and working experience. All students are required to present graduate thesis before graduation.

## JOB PROSPECTS

Software engineer and Programmer in IT company and government department. Almost half of 2020 Graduate Students get offers from famous universities for Ph. D. study. all remainders get fulfilling position in China or in their own country.

## EDUCATION OBJECTIVES

Students are expected to be able to understand the theory and application of computer science and can design softwares, apply independent learning and reasoning in the computing discipline, work in both independent and collaborative ways with others; relate professional and disciplinary information and ideas to diverse audiences in effective and appropriate ways, can apply in-depth knowledge and competencies in advanced areas of the computing discipline.



# CORE COURSES

## **Core Course Computer Graphics** **Instructor Jiawei XU**

### **Course Description**

This course provides a lot of practical content, covering the latest developments and achievements in computer graphics in recent years, and is accompanied by a large number of programs written for the purpose of Human-Computer Interaction (HCI), particularly in the field of Game Programming. This course is divided into 18 lectures, which comprehensively and systematically explains the basic concepts and related technologies of HCI. Firstly, this course summarizes the computer graphics, then explains the object representation, algorithm and application of two-dimensional graphics, and the related technology, modeling and transformation of three-dimensional graphics, and then introduces the content of hierarchical modeling, animation technology, spline curve representation, texture processing, and finally the lighting model, color model and interactive input method. For further information, please refer to the textbook: Sebastiano M. Cossu, Beginning Game AI with Unity, Apress, 2021.

## **Core Course Deep Learning** **Instructor Haiguang HUANG**

### **Course Description**

Deep Learning is a machine learning technique that teaches computers to do what comes naturally to humans: learn by example. Deep learning is a key technology behind driverless cars, enabling them to recognize a stop sign, or to distinguish a pedestrian from a lamppost. This course is transforming multiple industries. This five-course specialization will help you understand Deep Learning fundamentals: Neural Networks and Deep Learning, Improving Deep Neural, Structuring Machine Learning Projects, Convolutional Neural Networks, Sequence Models, after apply them, and build a career in AI. Besides these, this course also introduces how to use Pytorch. It consolidate theory learning from in class with 8 practices.

## **Core Course Pattern Recognition** **Instructor Jie HU**

### **Course Description**

Emphasis of this course is placed on fundamental algorithms and advanced methods of algorithmic design, analysis, and implementation. Techniques to be covered include amortization, randomization, fingerprinting, word-level parallelism, bit scaling, dynamic programming, network flow, linear programming, fixed-parameter algorithms, and approximation algorithms. Domains include string algorithms, network optimization, parallel algorithms, computational geometry, online algorithms, external memory, cache, and streaming algorithms, and data structures.

## **Core Course Principle & Application of Artificial Intelligence** **Instructor Jie HU**

### **Course Description**

Previous treatments of Artificial Intelligence (AI) divide the subject into its major areas of application, namely, natural language processing, automatic programming, robotics, machine vision, automatic theorem proving, intelligent data retrieval systems, etc. The major difficulty with this approach is that these application areas are now so extensive, that each could, at best, be only superficially treated in a book of this length. Instead, I have attempted here to describe fundamental AI ideas that underlie many of these applications. My organization of these ideas is not, then, based on the subject matter of their application, but is, instead, based on general computational concepts involving the kinds of data structures used, the types of operations performed on these data structures, and the properties of control strategies used by AI systems. I stress, in particular, the important roles played in AI by generalized production systems and the predicate calculus. The notes on which the book is based evolved in courses and seminars at Stanford University and at the University of Massachusetts at Amherst. Although certain topics treated in my previous book, Problem Solving Methods in Artificial Intelligence, are covered here as well, this book contains many additional topics such as rule-based systems, robot problem-solving systems, and structured-object representations.

# CIVIL AND HYDRAULIC ENGINEERING



## PROFILE

Importance is attached to teaching of this specialty combining the basic theories as well as the theories of science and technology with the practice, for the students to grasp a substantial fundamental theoretical knowledge about mathematics, and mechanics, as well as the knowledge about humanities and sociology, and the fundamental theoretical knowledge about civil engineering technology, to be provided with a relatively high foreign language level and computer application ability, to be given with the basic training for registered engineer, and to be trained into a high-level science & technology and management talent typical of good integrated quality of engineering science & technology and humanities & sociology, rich in innovative spirit. The students shall be able to engage in planning, design, construction, management, and scientific research, etc in the fields of architectural engineering, road and bridge engineering, municipal engineering, geotechnical engineering, and engineering management, etc, as high-quality composite-type science & technology and management talents rich in innovative spirit.

## DURATION

3 years

## JOB PROSPECTS

With the continuous development of world economics, road network transformation and urban infrastructure construction, the demand for civil engineering technicians will continue to rise in the current and future period. In the talent market of many countries, the demand for talents in civil engineering and construction has jumped to the first place. Students with our professional training, after graduation, they can freely to choose continue their further study or find their job in civil engineering area.

## EDUCATION OBJECTIVES

This program, provided by College of Civil Engineering and Architecture, aims to foster international students that are proficient in Chinese and English, that are familiar with and love Chinese culture, that are keen with international communication and cooperation. The program is designed to provide students with a broad-based and high quality interdisciplinary education in the areas of structural, transportation and geotechnical engineering, as well as practical trainings. Our students are anticipated to become all-round civil engineers who are ready to work on various fields of civil engineering, such as building design and construction, urban infrastructure construction, construction management, investment and development.

## CORE COURSES

Advanced Soil Mechanics, Advanced Concrete Structures, Advanced Steel Structure, Structural Dynamics, Elastoplastic Mechanics and Finite Element; Computational Structural Mechanics and Seismic Engineering Structure etc.

**Course Title** Finite element method

**Credits** 4

**Credit Hours** 64

**Semester** Fall

**Course Description**

Finite element analysis is a main course with strong theory and application. Its main task is to let students in material mechanics and elastic mechanics course on the basis of further study and the structure of the basic knowledge of construction internal force and displacement analysis of finite element analysis method, cultivate their ability to use computer software to solve practical engineering problems, for the subsequent courses and after the graduation engaged in related engineering work lay the necessary foundation.

**Course Title** Fluid Mechanics and Hydrology Engineering

**Credits** 4

**Credit Hours** 64

**Semester** Fall

**Course Description**

Fluid mechanics is the study of the mechanical movement of fluids (liquids and gases) and its applications. It mainly studies the static state and motion state of the fluid itself under the action of various forces, as well as the interaction between the fluid and the solid wall, between the fluid and the fluid, and between the fluid and other moving forms, as well as the law of the flow. Fluid mechanics is an important branch of mechanics, and engineering fluid mechanics (applied fluid mechanics) focuses on the practical application in production and life, it does not pursue mathematical rigor, but tends to solve practical problems in engineering.

**Course Title** Advanced structural analysis

**Credits** 4

**Credit Hours** 64

**Semester** Fall

**Course Description**

Advanced structural analysis is one of the specialized courses for doctoral candidates in structural engineering, disaster prevention and mitigation engineering and protection engineering, bridge and tunnel engineering. It is an examination course designed to test candidates' basic theoretical knowledge and method system of civil engineering. The assessment criteria for passing the course examination are based on a deep understanding and proficiency of the relevant test points.

# ELECTRICAL ENGINEERING



## JOB PROSPECTS

Senior engineers of State Grid (Electric Power System) are engaged in the operation and maintenance of the power grid, development design and testing High-power special power supply field, industrial electrical design and manufacturing field, electronics, and control field, photoelectronic testing field of senior engineers, and are also engaged in research and development, design, manufacturing, testing and other work. Senior engineers in the field of photovoltaic power generation and wind power generation are engaged in development, design, testing, operation, and maintenance.

## PROFILE

Electrical engineering represents the national level master's sections in both the "12th Five-Year Plan" key disciplines in Zhejiang Province and the "13th Five-Year Plan" first-class disciplines. The major is one of a key development discipline at Wenzhou University. Electrical engineering and automation majors are designated for the national first-class undergraduate professional construction pilot, and they pass through the Ministry of Education engineering education professional certification.

Three distinct discipline directions:

- (1) Power electronics and power transmission: special power technology and application, power electronics testing technology, green power conversion and control technology.
- (2) Electric motors and electrical appliances: electrical theory and intelligent electrical technology, new photo-electronic light sources and devices, motor transmission and control.
- (3) Electrical theory and new technology: photo-electronic functional devices and digital detection technology, electronic devices and circuit design, photo-electronic intelligent detection technology.

The program employs more than 60 teachers consisting of the National 100 Million Talents, the Zhejiang Province block economic transformation and upgrading experts, the Zhejiang Smart Grid low-voltage electrical technology team for key scientific and technological innovation, the Zhejiang Province coastal engineering special power technology innovation team, and Chinese contemporary inventors. Among the national, provincial, and municipal levels, it is built with 13 scientific and technological innovation platforms. Including the low-voltage electrical technology innovation service platform that is a joint of the national electrical digital design technology with the local engineering laboratory at Wenzhou. In the past 5 years, it has won once the second prize from the National Science and Technology Progress Award, once the first prize and once the second prize from the Ministry of Education's Science and Technology Progress Award, once the Chinese Patent Prize, twice the second prizes from Zhejiang Province's Science and Technology Progress Award, and special award from the 10th Invention and Entrepreneurship Award.

## DURATION

3 years

## EDUCATION OBJECTIVES

In the fields of power system operation and maintenance, electrical equipment manufacturing, new energy development and control, it develops advanced research talent. People are cultivated with a high sense of social responsibility, good professional ethics, and scientific and rigorous attitude. Moreover, it engages in power system high-power special power supply technology and applications, power electronics testing technology, green power conversion and control technology, intelligent electrical technology, motor transmission and control, photo-electronic functional devices and digital detection technology and other research work.

## PRACTICAL TEACHING

Each research direction has an engineering laboratory and a corresponding research base (enterprise). The National Joint Engineering Laboratory of Electrical Mathematics Technology and its scientific research bases (enterprises), the Computer Industry User Side Photo-voltaic Micro-Grid Engineering Center, and Wenzhou New Energy Micro-Grid Engineering Technology Research Center carry out high-power special power supply technology and application, power electronics testing technology, and practical teaching of green power conversion and control technology. Zhejiang Province Low Voltage Electrical Engineering Technology Research Center, Wenzhou Intelligent Electronics Industry Technology Research Center, Yueqing Industrial Research Institute carries out practical teaching in intelligent electrical technology, electrical manufacturing, and motor transmission. Photo-electronic functional devices and digital detection international scientific and technological cooperation base in Zhejiang Province, Wenzhou Micro-optical electrical parts key laboratory, and integrated circuit and IOT intelligent system key laboratory in Wenzhou carry out practical teaching of photo-electronic functional device development, photo-electronic digital detection, electronic devices, circuit design and control.

## CORE COURSES

### Core Course New Energy Technologies Instructor Fuhua LI

#### Course Description

Designed for postgraduates, this course makes an introduction to emerging energy technologies, aiming at providing students with a scientific understanding of new energy generation technologies in response to climate change and energy crisis. This course first focuses on the fundamental processes of generating energy and storing energy in these new technologies, involving solar energy, hydrogen energy, ocean energy, biomass energy, wind energy and geothermal energy. It manages to make students comprehend the characteristics of these technologies. Based on the fundamental comprehension, it brings latest published research achievement to share and discuss with students, and further to encourage students to develop new ideas.

### Core Course Smart Electric Apparatus and Control Instructor Liang SHU

#### Course Description

This course is mainly focus on the principles and applications of smart electrical apparatus, including the basic concepts of smart apparatus (Circuit breakers, electric contactors, relays, UPS, etc.), the functions, the systematic design, and the smart control methods. The course is divided into 8 parts. In part 1, the basic concepts of smart apparatus and the applications are introduced. In part 2, the basic classification, functions and control methods of primary equipment of smart apparatus are discussed. In part 3, design, smart sensing and control of electric apparatus are demonstrated. Applications of finite element method will be discussed to show how electromagnetic devices can be designed and optimized via advanced numerical methods. Also, different smart control methods are demonstrated to show the procedures of controller design to optimize the dynamic performance of different circuit breakers and electromagnetic devices. Advanced sensing methods and principles will also be discussed to help students to complete the design and control loops of smart apparatus. In part 4, principles of electromagnetic compatibility (EMC) and electromagnetic interference (EMI) will be discussed. Testing, standards, and testing procedures of EMC and EMI will be demonstrated.

### Core Course Numerical Analysis Instructor Hezhu SHAO

#### Course Description

Numerical Analysis provides graduate students with basic numerical computation methods on the one hand, but also focuses on the latest developments in computing technology, such as artificial intelligence and big data science, etc. In this course, students will learn techniques such as solving systems of linear algebraic equations, function interpolation, function approximation and fitting, numerical integration and differentiation, numerical solution of nonlinear equations and systems of equations, solving matrix eigenvalue problems, and ordinary differential equations numerical solutions, and other techniques. The software platform we use is Mathematica, and students will learn basic programming methods. Most students will get good hands-on programming experience and an understanding of basic theoretical computational methods, and this class also helps students to broaden their horizons of cutting-edge computational techniques. The textbooks we use are self-published and will be selected from well-known domestic and international textbooks, from which we will learn from the best in order to adapt to the learning abilities and needs of our students.

#### Reference books include:

Elements of Numerical Analysis with Mathematica by John Loustau, Computational Physics: Problem Solving with Computers by Rubin H. Landau, Manuel J. Páez, and Cristian C. Bordeianu



# Mechanical Engineering

## PROFILE

This master's program is run by the International Science and Technology Cooperation Base for Laser Processing Robot (ISTCB-LPR), Wenzhou University. ISTCB-LPR offers a Master of Science degree in Mechanical Engineering (MSME). Mechanical Engineering in WZU, certificated with the national "plan for educating and training outstanding engineers (PETOE)", has over 100 faculty staff recruited from top universities and research institutes worldwide. The ISTCB-LPR has established a profound impact on industrial application of laser, laser-based manufacturing and intelligent manufacturing. Upon graduation, you will:

Master advanced techniques of lasers and modern machine tools in mechanical engineering field.

Analyze, interpret, and apply the information obtained by experiment, computation, or analysis, or available in the literature.

Translate practical mechanical engineering problems into an analytical or numerical solution, or to laser experimental investigation.

Apply knowledge, facts, and theories immediately in your work outside the classroom.

## DURATION

3 years

## EDUCATION OBJECTIVES

The MSME degree program students are offered with research experiences in four broad areas: Laser Material Processing, Laser-equipped Robotic Systems & Controls, Laser-induced Spectrum Analysis, and Solid Mechanics, Design, & Manufacturing. The research opportunities are diverse, and they can range from working closely with an individual faculty member and/or as part of a team in a large interdisciplinary research center. Graduate students are expected to engage in research that pushes the boundaries of science and engineering and leads to new knowledge creation.



## PRACTICAL TEACHING

Almost all of our graduate students are involved in a research project. Most research activity in the ISTCB-LPR is organized around our world-class research laboratories which support a variety of experimental, computational, and analytical activities. Most students have opportunities to practice in companies, institutions, and other internship units to train necessary engineering skills.



## JOB PROSPECTS

The Mechanical Engineering graduate program is designed principally for students who wish to enter industry as practicing professionals. This program acquaints students with a basic and multidisciplinary education in laser material processing, industrial robots, optoelectronic devices, digital factory and manufacturing, automatic intelligent manufacturing system. Our students are anticipated to be competent in tackling engineering problems in reality and undertaking mechanical engineering and management jobs, capable of technology innovation, managing or starting enterprises to serve economic and social development.



# CHINESE LANGUAGE LEARNING PROGRAMS

## 中文语言学习



### LONG-TERM PROGRAM

The Chinese Language Training Courses focus on training of Chinese listening and speaking abilities. The courses are divided into three different levels, meeting the needs of students with different language proficiency. Foreign students can quickly master the Chinese pronunciation, and can use basic Chinese for communication through classroom exercises and extra-curricular experience. At the same time be able to identify commonly used Chinese characters, grasp basic Chinese grammar, and understand Chinese customs and culture. Students can grasp elementary Chinese reading and writing skills and cross-cultural communicative competence. The teaching time of the program is flexible and the content is rich. It is suitable for foreign friends studying, working and living in Wenzhou.

### SUMMER PROGRAM

The program is offered at three different levels: elementary, intermediate and advanced levels. Students will be placed into different classes according to their Chinese language proficiency. Elective courses are available-traditional Chinese music, painting, calligraphy, martial arts, etc. Also in the program, you can experience Chinese culture by tutoring in China. We will show you around the Wenzhou City to experience traditional Chinese culture. At the end of the program, you will become a China Hand who can not only speak Chinese but also understand Chinese culture!

### GROUP PROGRAM

WZU will meet the requirements of foreign universities, enterprises or any type of group or organization, to create a tailor-made course throughout the year. The course can integrate Chinese teaching, cultural experience, hands-on practice and social observation to give learners the most efficient improvement of Chinese language skills and understanding of Chinese culture in a short time. Aside from the regular Chinese classes, Chinese cultural courses are offered for optional, such as Chinese folk customs, Chinese economy, calligraphy, Chinese traditional music, Chinese painting, paper-cutting, Tai Chi.



### TEACHING SCHEDULE

- A. Elementary Level : Intensive Reading, Practical Conversation, Listening Comprehension, Extensive Reading, etc.
- B. Intermediate Level : Intensive Reading, Listening and Conversation, Practical Writing, Extensive Reading, etc.
- C. Advanced Level : Intensive Reading, Advanced Comprehensive Chinese, Practical Writing, Extensive Reading, etc.

### APPLY ONLINE

To apply for non-degree programs visit <http://study.wzu.edu.cn>

### PROGRAMS

Program	Duration	Qualifications	Application Duration	Fee(RMB)
Long-Term Program	One semester or above	aged 18 above	Until January 15 <sup>th</sup> (Spring Intake) Until July 31 <sup>st</sup> (Autumn Intake)	1. Application fee: 400 RMB 2. Tuition fee: 7000 RMB /semester 12000RMB/year 3. Textbook fees:varied each semester
Summer Program	3 weeks	aged 18 above	Until May 15th	1. Application fee: 400 RMB 2. Tuition fee: 6000 RMB 3. Free of charge:textbook fee, Chinese Culture Courses,four culture experiences in Wenzhou,accommodation, 4. Fee charged separately:one-day culture experience in Hangzhou (optional)
Group Program	Variable upon request, from 1 week to 3 months,may start any time of a year	Minimum 15 students	All through the year	Negotiable