INTERNATIONAL FACULTY STEERING COMMITTEE

SOFTWARE AND INFORMATION TECHNOLOGY

PROGRAMS TAUGHT IN ENGLISH LANGUAGE

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Noble in Spirit; Endless in Knowledge.
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- Bachelor's Program
- Master's Program
- Ph.D Program
Economics

What is the program about?
- This special undergraduate program in economics is designed to train academic and business leaders of the future. It is a selective program open to both Chinese and international students with all instructions in English. Its curriculum is closely modeled after top economics programs in the U.S., and most instructors hold Ph.D.s from leading economics institutions in the West.
- The program takes four years to complete, two semesters per year, and about 16 weeks per semester followed by final exams. There are two specialized fields available, i.e., economics and finance. However, regardless of the specialization, all students follow a common core curriculum in the first two years of study that builds a solid foundation in economic reasoning as well as essential skills in mathematics, statistics, and econometrics. From the third year on, more elective courses become available as students sharpen their knowledge in specialized fields in economics or finance. In the last one or two semesters, students engage in internship and supervised research leading to theses. Upon completion of the program, graduates will be awarded B. A. in Economics, recognized by the Ministry of Education of the People’s Republic of China.

Program Structure
Sample Coursework for Economics Specialization
Year 1
- Calculus I
- Microeconomics I
- Principles of Accounting
- Linear Algebra
- Calculus II
- Macroeconomics I
- Economic History
Year 2
- Probability & Mathematical Statistics
- Microeconomics II
- Macroeconomics II
- Research Methods
- Econometrics I
- Game Theory
- Monetary Economics
- International Economics I
Year 3
- Econometrics II
- International Economics II
- Law and Economics
- Political Economy
- Industrial Economics
- Chinese Economy I
- Development Economics
- Elective Course
- Internship & Thesis

Year 4
- International Settlements
- International Financial Management
- Elective Course
- Internship & Thesis

Note: International Economics I focuses on international trade, while International Economics II focuses on international finance.

Sample Coursework for Finance Specialization
Year 1
- Calculus I
- Microeconomics I
- Principles of Accounting
- Linear Algebra
- Calculus II
- Macroeconomics I
- Economic History
Year 2
- Probability & Mathematical Statistics
- Microeconomics II
- Macroeconomics II
- Research Methods
- Econometrics I
- Game Theory
- Monetary Economics
- International Economics I
Year 3
- Econometrics II
- International Economics II
- Financial Investment
- Financial Economics
- Corporate Finance
- Elective Course

Fees
- Registration Fee: 400 RMB
- Tuition: 26,000 RMB / year
- Medical Insurance: 800 RMB / year

Contact Information
- School of Economics
- Email: intleco@sdu.edu.cn
- Tel: +86-(0)531 88369992
- www.soe.sdu.edu.cn

Highlights of the Program
- As a top school in China, the undergraduate admission to Shandong University is very competitive, and more so for economics majors. The best of them are then selected into this elite program. Moreover, the program is open to both Chinese and international students such that they can interact with each other on a regular basis for mutual benefits, in order to gain a deeper understanding of the Chinese and Western cultures, and build networks for future career success in a global economy.
What is the program about?
Shandong University is one of the earliest universities that admit international students for studying MBBS (Bachelor of Medicine, Bachelor of Surgery) in China. The training program was launched in 2002 at Shandong University School of Medicine accredited for enrolling international students for MBBS in English. The aim of this program is to train qualified physicians and surgeons through lecturing, laboratory teaching and supervised clinical practice in six to eight years. Two teaching modes, in Chinese and English, respectively, are offered. Among the current international students of over 300 at SUSOM, most select the English teaching mode. During the first three years, students mainly study basic knowledge of humanity, culture and medicine. Clinical courses are given by clinicians and training enhanced in affiliated teaching hospitals in the following two years and the last year is for clinical rotation in different departments. Courses of study are delivered and examined fully in English. We enjoy a good reputation among international students for the high-quality teaching resource. MBBS graduates shall not only achieve the requirement as a bachelor of medicine in China who will obtains solid medical knowledge, adapt clinical skill and good occupational qualities, but adapt the requirements of source of countries and international society. The current international students of 303 at SUSOM come from 23 countries and regions in Asia, Europe, America, Africa and Australia, etc.

How long does the program last?
The study duration is six years. Students must complete the course and get the degree within 8 years.

Who is eligible to apply?
Applicants should have high school diploma. Since English is the teaching medium, applicants not from English-speaking countries shall offer your TOEFL score or relevant certificate.

Program Structure
Core Courses
- Cell Biology
- Human Anatomy
- Neuroanatomy
- Histology and Embryology
- Human Physiology
- Biochemistry & Molecular Biology
- Human Parasitology
- Medical Immunology
- Medical Microbiology
- Behavioral Science
- Human Genetics
- Pathology
- Pharmacology
- Pathophysiology
- Preventive Medicine
- Diagnostics
- Operative Surgery
- Internal Medicine
- Surgery Medicine
- Gynecology and Obstetrics
- Pediatrics
- Traditional Chinese Medicine
- Nuclear Medicine
- Medical Imageology
- Infectious Diseases
- Psychiatry
- Medical Ethics

Credit Requirements
The total credits for the program are 237.

Highlights of the Program
Students earn the Shandong University Master degree in a program that is tailored to the needs of international students, who want to be a doctor in the future. With the MBBS degree, students can apply for postgraduate study or board exam and practice to be physicians and surgeons. SDUSOM offers a medical training program that pre-probation, probation, clinical skills training and rotation are systematically organized.

Fees
Registration Fee: 400 RMB
Tuition: 45,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
School of Medicine
Email: zs@sdu.edu.cn
Tel: +86-(0)531 8838 2725
http://www.mbbs.sdu.edu.cn/
Project Management

What is the program about?
The projectification of society has resulted in a current and future demand for project professionals who can efficiently implement large, complex projects and programs, especially international projects and programs. This program successfully addresses the strategic and holistic demands of modern projects in contemporary organizations by providing students with a systematic understanding of project management knowledge, methods and tools as well as international views and thoughts.

With a series of compulsory core courses on project management and elective courses on Chinese culture and international business, students will develop knowledge to critically examine theoretical and practical perspectives, cultivate key employability skills such as teamwork and leadership, while developing competencies to facilitate business transformation, continuous improvement, organizational change, and multi-national cooperation projects.

How long does the program last?
The two-year master’s program will be fully taught in English. Upon the completion of the program, graduates will earn a Master Degree of Project Management issued by Shandong University, recognized by the Ministry of Education of the People’s Republic of China.

Who is eligible to apply?
Applicants should have a bachelor’s degree. While professional experience such as employment or professional qualifications are not essential, these are taken into consideration when awarding scholarships. Successful scholarship candidates tend to have considerable relevant industrial experience as well as vocational or professional qualifications.

Program Structure

Courses

Credit Requirements
The total credits required for the program are 24 (16 study hours per credit).

Master’s Thesis
Students undertake original research through submission of a Master’s thesis. Students begin this process from the beginning by developing the necessary skills to formulate a research proposal. Topics for the thesis are confirmed during Semester 3, either internally through the guidance or proposals from academic staff, or externally through an Associate Partner or industrial contacts.
The thesis should be submitted on time and defended during the fourth term.

Highlights of the Program

Industry Partners: Close association and partnerships with industrial companies have been established. Therefore, students will have the opportunity of attending organized events, guest lectures, internships, site visits, etc. Our cooperative partners include but not limited to China National Petroleum Company, State Grid Corporation of China, China Railway Construction Co., Ltd. China National heavy Duty Truck Group Co., LTD, Haier Group, Inspur Group Co., Ltd. and Shandong Energy Group Co., Ltd.

Visiting Scholars/Guest Lectures: This program will invite leading scholars from USA, Italy, Australia, Finland and other countries and industry practitioners to deliver in-depth seminars.

Fees
Registration Fee: 400 RMB
Tuition: 123,000 RMB (in total)
Medical Insurance: 800 RMB/year

Contact Information
School of Management
Email: suntao@sdu.edu.cn
Tel: +86-15305415959
http://www.mpm.sdu.edu.cn/
**Mechanical Engineering**

What is the program about?
The program emphasizes the advanced study and research on the design, analysis, planning, operation, and management of mechanical systems, providing a broad and deep background in mechanical engineering. In the first year, students will take a variety of courses. In the second and third year the students will do research in one of the school’s highly active and well-funded research groups.

How long does the program last?
The three-year master’s program will be fully taught in English. Upon the completion of the program, graduates will earn the Master’s Degree of Mechanical Engineering.

Who is eligible to apply?
Applicants should have a bachelor’s degree in mechanical engineering or a relevant field. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure

Core Courses:
- Engineering Mathematics
- Advanced Manufacturing Technology
- Digital Control System Analysis and Design
- Finite Element Method
- Professional Practice
- Modeling, Analysis, and Simulation of Mechatronics System
- Elasticity and Plasticity

Optional Courses:
- Engineering Fracture Mechanics
- Digital Control System Analysis and Design
- International Networked Teams for Engineering Design (INTEnD)
- Metal Cutting Principles and Cutting Tool Technology
- Mechanical Vibration

Modern CNC Technology
Man-Machine Engineering
Green Manufacturing and Remanufacturing

Credit Requirements
The total credits for the program are no less than 30, in which no less than 20 credits are for compulsory (core) courses.

Master’s Thesis
In the third year, the students must finish their master’s thesis, and defend it in the sixth term (in mid-May). The thesis should combine theory and practice and embody the consciousness of innovation and the ability of solving practical problems.

Graduation Requirements
Students will receive degree certificate after finishing requested credits and thesis and passing the defense of their thesis. Students can graduate in advance if they satisfy all the following requirements.

- a. get all requested credits
- b. accomplish the thesis
- c. publish a thesis-related paper in SCI or EI journals as the first author.

Highlights of the Program

State-of-art Facilities
High Degree of Students Satisfaction
Leaders in High Speed Machining

Fees
- Registration Fee: 400 RMB
- Tuition: 34,000RMB/year
- Medical Insurance: 800RMB/year

Contact Information
School of Mechanical Engineering
Email: thu@szdu.edu.cn
Tel: 86-(0)531-88392118
http://www.mech.szdu.edu.cn/en/

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**Computer Science and Technology**

What is the program about?
The program is to give students a fundamental understanding of the various areas of computer science and technology, as well as a broad understanding of current research issues, with in-depth insight into one or more fields, and skills in research methodology through one-year research activities. The program aims to make the student capable of independent participation in research and development work, and to prepare the students for challenges in their careers.

How long does the program last?
The three-year master’s program will be fully taught in English. Upon the completion of the program, graduates will obtain a Master’s Degree of Computer Science and Technology (MSc), recognized by the Ministry of Education of the People’s Republic of China.

Who is eligible to apply?
Applicants should have a bachelor’s degree in computer science and engineering or computer related areas. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure

Core Courses:
- Algorithm Design
- Database Systems
- Computer Graphics
- Optional Courses
- Data Mining
- Distributed Systems
- Parallel Computing
- Cryptography
- Design of VLSI and System
- GPU Computing
- Computer Vision and Image Analysis
- Real-time Systems

Software Security
Machine Learning
Pattern Recognition
Data and Computer Communication
Computer and Information Security
Human-computer Interaction Technology

Credit Requirements
The total credits for the program are no less than 30, in which no less than 24 credits are for compulsory (core) courses.

Master’s Thesis
In the third year, the students must finish their master’s thesis with no less than 20,000 words in total, and defend it in the sixth term (in mid-May).

Graduation Requirements
Before graduation students can be officially admitted to degree candidacy. They must satisfy one of the following requirements:
- a. complete an academic paper to publish in relevant journals and academic conferences
- b. participate in a research plan and submit a summary report
- c. complete a phase of a development project and submit a summary report

Highlights of the Program
Students could get internship opportunities in Microsoft Asia Academe, IBM China Research Laboratory, Baidu Research Institute, Alibaba, etc. Graduates can get offers from famous universities, research institutes and international companies.

Fees
- Registration Fee: 400 RMB
- Tuition: 34,000RMB/year
- Medical Insurance: 800RMB/year

Contact Information
School of Computer Science and Technology
Email: csgra@szdu.edu.cn
Tel: 86-(0)531-88395951
http://www.cs.szdu.edu.cn/endefault.do
International MBA

What is the program about?
China has rapidly become one of the largest economies in the world. While more Chinese open up their horizons with global perspective in their business and daily life, people from outside of China are equally aware of importance of gaining insightful knowledge of China. This would be the first international student MBA program in China. This exciting International MBA program is designed to provide in-depth analysis on China’s economy and finance with topical discussions with global perspective. There are globally renowned scholar and experts among our teaching staff who excel both in their own subjects and understanding of real China. On-site teaching and study visit are important part of curriculum which enable students to gain insightful knowledge of three main pillars of the Chinese economy: state-owned enterprises, small-medium private companies, and foreign companies.

How long does the program last?
Shandong University International MBA offers an 18-month full-time program and will be fully taught in English.

Who is eligible to apply?
1. Applicants must be Non-Chinese citizens and possess a valid and private passport; bachelor’s degree or above;
2. Applicants are either native English speakers, otherwise they have to pass Language Requirement: IELTS (6.0 or above), new TOEFL (80 points or above) or other comparable certification of English proficiency.

Program Structure
Compulsory Course
- Introduction to Modern Economics
- Chinese Economy in Comparative Perspective
- Financial Accounting with Chinese Characteristics
- China’s Monetary Policy, Banking and Stock Market in Comparative Perspective
- Human Resources with Chinese Characteristics
- Marketing with Chinese Characteristics
- Quantitative Methods for Business
- History of China’s Economy
- Introduction to China’s accounting system

Elective Courses
- Review and Prospect of Chinese Economic Reforms
- Comparison Analysis on Chinese and Western financial system and Institution
- China’s Commercial Diplomacy
- Past, Present and Future: China’s Economic Policy Foreign Trade and FDI Policy industrial Policy
- employment Policy Taxation Policy
- Comparison of Chinese and Western Culture
- Comparison of Chinese and Western Political System
- Comparison of Chinese and Western Law System
- Comparison of Chinese and Western Philosophy
- Chinese History and Archaeologist
- Chinese Classics and Leadership
- China Traditional Cultural Experience
- Confucius Cultural Experience
- Corporate M – Learning
- China’s Field Trip

Credit Requirements
Shandong University International MBA designs a 34-credit curriculum. Students must complete full 34 credits to obtain the MBA degree. That includes:
- 22 credits for compulsory courses (i.e. 2 credits for warm-up module, 16 credits for core module, 4 credits for integration module)
- 8 credits for elective courses. (i.e. 8 credits for featured module and no less than 4 credits for practical part)
- 4 credits for thesis

Highlights of the Program
1st MBA program in China solely offered to international students.
More than 100 years of history at Shandong University (Established in 1902).
Heartland of Chinese culture.
World famous economic/economist leadership program.
Invest in your career: Low cost, (with) big returns.

Fees
Registration Fee: 400 RMB
Tuition: 60,000RMB/year (90,000RMB TOTAL)
Medical Insurance: 800RMB/year

Contact Information
School of Economics
cgce@sdju.edu.cn
Tel: 0531-88361187
http://www.econ.sdu.edu.cn/imba/
Economics (Center for Economic Research)

What is the program about?
The Center for Economic Research was established in 2001 as an extension of the Property Rights Research Center founded in 1996. It is an economic research and talent development institution working under the auspices of Shandong University.

The program is designed for students who have undergraduate knowledge of Economics and wish to enhance their skills to an advanced level compatible with a career in related industries. Through theories and practical applications, the program explores various courses including institutional economics, econometrics, experimental economics, law and economics, mathematical economics, financial economics, etc. Students acquire knowledge and skills through a combination of lectures, seminars and thesis.

Optional Courses
- Advanced Microeconomics
- Game Theory and Information
- Empirical Methods for Microeconomics
- Research
- Intermediate Public Economics
- Lectures on Advanced International Finance
- International Investment Theory
- Advanced Macroeconomics
- Advanced Econometrics
- Comparative Financial System

Credit Requirements
The total credits required for the program are 20.

Master’s Thesis
In the third year, the students must finish their master’s thesis of no less than 20,000 words. The thesis should be submitted on time and defended during the sixth term (in mid-May).

Highlights of the Program
Students earn the Shandong University Master’s degree in a program that is tailored to the needs of international students, who want to have an in-depth exposure to Chinese economy, Chinese economy reform and practice, and Chinese tradition and modern culture, and who have potential intent to work or advance their career in the business circle in China in the future.

Program Structure
Core Courses
- Advanced Macroeconomics
- Advanced Microeconomics
- Econometrics
- New Political Economics
- Institutional Economics
- Financial Economics
- Frontier Lecture

Fees
Registration Fee: 400 RMB
Tuition: 32,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
Center for Economic Research
Email: jy_song@sdu.edu.cn,
tianchuan@sdu.edu.cn
Tel: 86(0)531-88364128/88363677

Graduation Requirements
Before graduate students can be officially admitted to degree candidacy, they must satisfy the following requirements:

a. Minimum of 36 credits must be completed.

b. Master’s thesis must be passed.

Highlights of the Program
Teaching staff of the Center for Economic Research possess doctoral degrees from famous universities in China and abroad. Most of them have worked or have had post doctoral stints in foreign universities for one year or more. Some researchers of the center for Economic Research have ranked at the forefront of leading research in China.

Optional Courses
- Mathematics in Economics
- Theory of Property
- Corporate Finance
- Experimental Economics
- Evolutionary Economics
- Investment
- Frontier on International Economic Theory
- Energy Economics

Credit Requirements
The program requires a minimum of 36 credits, in which, Advanced Macroeconomics, Advanced Microeconomics and Econometrics are compulsory courses.

Master’s Thesis
In the third year, students should finish their master’s thesis and defend it in the sixth term (in mid-May).

How long does the program last?
The three-year master’s program is fully taught in English. Upon completion of the program, graduates will earn a Master’s Degree in Economics, recognized by the Ministry of Education of the People’s Republic of China.

Who is eligible to apply?
Applicants should have a bachelor’s degree in Economics or related areas. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Microeconomics
- Macroeconomics
- Econometrics I & II

Review and Prospect of Chinese Economic Reforms
Hotspots Series of China’s Industrial Economy
Chinese Economy in Comparative Perspective

Optional Courses
- Advanced Microeconomics
- Game Theory and Information
- Empirical Methods for Microeconomics
- Research
- Intermediate Public Economics
- Lectures on Advanced International Finance
- International Investment Theory
- Advanced Macroeconomics
- Advanced Econometrics
- Comparative Financial System

Credit Requirements
The total credits required for the program are 20.

Master’s Thesis
In the third year, the students must finish their master’s thesis of no less than 20,000 words. The thesis should be submitted on time and defended during the sixth term (in mid-May).

Highlights of the Program
Students earn the Shandong University Master’s degree in a program that is tailored to the needs of international students, who want to have an in-depth exposure to Chinese economy, Chinese economy reform and practice, and Chinese tradition and modern culture, and who have potential intent to work or advance their career in the business circle in China in the future.

Program Structure
Core Courses
- Advanced Macroeconomics
- Advanced Microeconomics
- Econometrics
- New Political Economics
- Institutional Economics
- Financial Economics
- Frontier Lecture

Fees
Registration Fee: 400 RMB
Tuition: 32,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
School of Economics
Email: inteco@sdu.edu.cn
Tel: +86(0)531 8836 9992
http://www.soe.sdu.edu.cn/

Economics

What is the program about?
This program is designed to meet the needs of those who wish to understand China’s economy. The courses are intended to equip students with the main tools of the professional economist, whether they intend to work in government, international organizations or business. The structure of the program is flexible and allows students to specialize to some extent in either economic theory or China’s economy. With a series of compulsory core courses on economic theory, the program combines lectures, seminars and tutorial supervision. The program provides an introduction to the study of Chinese economy, drawing on a range of aspects including industrial structure, financial market, trade policy, etc. The course not only prepares students for research work in an academic discipline but also is suitable for those with career interests related to China.

Majors available
- Finance
- International Trade
- World Economy
- Field of Study
- Globalization and Chinese Economy

How long does the program last?
The three-year master’s program will be fully taught in English. Upon the completion of the program, graduates will earn a Master’s Degree.

Who is eligible to apply?
Applicants should have a bachelor’s degree in economics. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Microeconomics
- Macroeconomics
- Econometrics I & II
Financial Mathematics

What is the program about?
The program provides the sound mathematical training needed for financial mathematics, along with a profound knowledge of economics and other related fields. Students will take a variety of courses, covering mathematical training, elementary finance, empirical, theoretical and computational tools, quantitative analysis techniques in data analysis, signal processing and statistical decisions, etc.

How long does the program last?
The three-year master's program will be fully taught in English. Upon completion of the program, graduates will earn a Master's Degree of Financial Mathematics, recognized by the Ministry of Education of the People's Republic of China.

Who is eligible to apply?
Applicants should have a bachelor's degree in mathematics. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Advanced Probability Theory
- Advanced Mathematical Statistics
- Stochastic Processes
- Financial Mathematics

Optional Courses
- Stochastic Control and its Applications
- Time series analysis
- The Theory of Derivative Security
- Stochastic Computing
- Mathematical Economics
- Nonparametric statistics
- Linear Models

Credit Requirements
The total credits for the program are no less than 30, in which no less than 24 credits are for courses.

Master's Thesis
In the third year, students must finish their master's thesis, and defend it in the sixth term (in mid-May). They must work closely with their advisor to define a focused topic and conduct the research. Students should also be bold and actively engaged in research activities, and strive to publish papers in academic journals.

Highlights of the Program
a. Top 3 mathematics & top 8 statistics in Mainland China according to CDR2012 approved by the Chinese Ministry of Education;
- Leading scientist: Peng Shige, a world-class mathematician as well as the founder of financial mathematics in China;
- Numerous cooperative financial institutions, e.g., China Financial Futures Exchange, Qilu Securities;
- First-rate hardware facilities;
- Abundant practice opportunities;
- Brilliant career prospects

Fees
Registration Fee: 400 RMB
Tuition: 34,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
School of Mathematics
Email: sdm@183.com
Tel: +86-(0)531 88364197
http://www.maths.sdu.edu.cn/

Pure and Applied Mathematics

What is the program about?
The program offers students a clear and relevant gateway to a successful career in education, scientific research, and business. Students will take a variety of courses, including Analysis, Topology, Algebra, Number Theory, etc., covering the essential knowledge required by all disciplines of mathematics.

How long does the program last?
The three-year master's program will be fully taught in English. Upon completion of the program, graduates will earn a Master's Degree of Pure and Applied Mathematics, recognized by the Ministry of Education of the People’s Republic of China.

Who is eligible to apply?
Applicants should have a bachelor's degree in mathematics. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Modern Algebra
- Modern Differential Geometry
- Modern Functional Analysis
- Foundation of Representation Theory

Optional Courses
- Advanced Probability Theory
- Algebraic Number Theory
- Advanced Mathematical Statistics
- Basic Analytic Number Theory
- Combinatorial Optimization
- Linear Models
- Stochastic Control and its Applications

Credit Requirements
The total credits for the program are no less than 30, in which no less than 24 credits are for compulsory (core) courses.

Master's Thesis
In the third year, students must finish their master's thesis, and defend it in the sixth term (in mid-May). They must work closely with their advisor to define a focused topic and conduct the research. Students should also be bold and actively engaged in research activities, and strive to publish papers in academic journals.

Highlights of the Program
a. Top 3 in mathematics and top 8 in statistics in China according to CDR2012 approved by the Chinese Ministry of Education;
- First-rate hardware facilities;
- Abundant practice opportunities;
- Brilliant career prospects

Fees
Registration Fee: 400 RMB
Tuition: 34,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
School of Mathematics
Email: sdm@183.com
Tel: +86-(0)531 88364197
http://www.maths.sdu.edu.cn/
**Information and Communication Engineering**

**What is the program about?**
The program explores up-to-date topics in communications engineering. It covers wide-ranging and in-depth materials, including digital communication, wireless communication, mobile networks, optical communication, ad hoc networks, information theory, antenna design, circuit design, and digital signal processing.
The program is for those who have undergraduate knowledge of communication engineering topics and wish to enhance their skills to an advanced level compatible with a career in related industries. It also serves as an excellent introduction and training to pursue PhD. degree.

**How long does the program last?**
The three-year master’s program will be fully taught in English. Upon the completion of the program, graduates will earn a Master’s Degree of Engineering, recognized by the Ministry of Education of the People's Republic of China.

**Who is eligible to apply?**
Applicants should have a bachelor’s degree in engineering or related areas. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

**Program Structure**

**Core Courses**
- Information Theory and Coding
- Stochastic Processes
- Digital Image Processing
- Array Signal Processing

**Optional Courses**
- Mobile Fading Channel and Error-Correcting System
- Optimization Theory and its Applications
- Next Generation Wireless Systems and Networks
- Space-Time Signal Processing

**Biopharmaceuticals**

**What is the program about?**
The program emphasizes advanced study and research in biotechnology and the development of new agents, such as antibody agents and immune agents. Students will take a variety of courses, including Biopharmaceuticals, Immunobiology & Immunotoxicology, International Pharmaceutical Regulations and Quality Control, etc., which will provide students with a systematic knowledge of modern biotechnology and biological drugs manufacture.

**Graduation Requirements**
Before graduate students can be officially admitted to degree candidacy, they must satisfy one of the following requirements:
- publish an academic paper in relevant journals and academic conferences
- participate in and complete an engineering project and submit a summary report
- complete a phase of a development project and submit a summary report

**Fees**
- Registration Fee: 400 RMB
- Tuition: 34,000 RMB/year
- Medical Insurance: 800 RMB/year

**Contact Information**
School of Information and Communication Engineering
Email: jufang@sdu.edu.cn
Tel: 86-(0)531 88364107/88364105
http://en.sdu.edu.cn/

**What is the program about?**
The program emphasizes advanced study and research in biotechnology and the development of new agents, such as antibody agents and immune agents. Students will take a variety of courses, including Biopharmaceuticals, Immunobiology & Immunotoxicology, International Pharmaceutical Regulations and Quality Control, etc., which will provide students with a systematic knowledge of modern biotechnology and biological drugs manufacture.

**Master’s Thesis**
In the third year, students must finish their master’s thesis, and defend it in the sixth term (in mid-May). They must work closely with their advisor to define a focused topic and conduct the research. Students should also be bold and actively engaged in research activities, and should publish at least one academic paper in journals.

**How long does the program last?**
The three-year master’s program will be fully taught in English. Upon the completion of the program, graduates will earn a Master’s Degree of Biopharmaceuticals, recognized by the Ministry of Education of the People’s Republic of China.

**Who is eligible to apply?**
Applicants should have a bachelor’s degree in pharmacy or biology. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

**Program Structure**

**Core Courses**
- Biopharmaceuticals
- Immunobiology & Immunotoxicology
- International Pharmaceutical Regulations and Quality Control
- Literature Reading and Writing
- Seminar of Progress in Drug Research
- Chinese Culture

**Optional Course**
- Drug Screening
- Bioseparation Technology
- Organic Spectroscopy
- Advanced Medicinal Chemistry
- Modern Pharmaceutics

**Credit Requirements**
The total credits for the program are no less than 30, in which no less than 18 credits are for compulsory (core) courses.

**Master’s Thesis**
In the third year, students must finish their master’s thesis, and defend it in the sixth term (in mid-May). They must work closely with their advisor to define a focused topic and conduct the research. Students should also be bold and actively engaged in research activities, and should publish at least one academic paper in journals.

**Highlights of the Program**
The school is a research leader with a strong reputation as a dynamic, vibrant and connected research organization, committed to producing high quality research outputs relevant to human health. We have 8 research institutes and 10 supported research centers and a growing number of specialized research groups and individuals undertaking world-leading research.

As a research student, you will work closely with the University’s institutes and centers, ensuring you experience a vibrant research environment. Such valuable practical experience will help you achieve more in all aspects of your life and put you on the pathway to a rewarding, fulfilling and international career.

**Fees**
- Registration Fee: 400 RMB
- Tuition: 36,000 RMB/year
- Medical Insurance: 800 RMB/year

**Contact Information**
School of Pharmaceutical Sciences
Email: wangfanfan@sdu.edu.cn
zhenghua@sdu.edu.cn
Tel: +86-(0)531 88381148
http://www.pharm.sdu.edu.cn/english/
Medicinal Chemistry

What is the program about?
The program emphasizes advanced study and research in drug design, chemical synthesis, and the development of pharmaceutical agents (drugs) in market. A variety of courses are provided to give students a systematic knowledge of drug design, advanced organic synthesis, structural identification, and the progress of drug discovery.

How long does the program last?
The three-year master’s program will be fully taught in English. Upon the completion of the program, graduates will earn a Master’s Degree of Medicinal Chemistry, recognized by the Ministry of Education of the People’s Republic of China.

Who is eligible to apply?
Applicants should have a bachelor’s degree in pharmacy or chemistry. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Advanced Organic Chemistry
- Organic Spectroscopy
- Advanced Medicinal Chemistry
- Literature Reading and Writing
- Seminar of Progress in Drug Research
- Chinese Culture

Optional Courses
- Biosynthesis of Natural Products
- Biopharmaceuticals
- International Pharmaceutical Regulations and Quality Control
- Drug Screening
- Modern Pharmaceutics
- Immunobiology & Immunotoxicology

Credit Requirements
The total credits for the program are no less than 30, in which no less than 18 credits are for compulsory (core) courses.

Master’s Thesis
In the third year, students must finish their master’s thesis, and defend it in the sixth term (in mid-May). They must work closely with their advisor to define a focused topic and conduct the research. Students should also be bold and actively engaged in research activities, and should publish at least one academic paper in journals.

Highlights of the Program
The school is a research leader with a strong reputation as a dynamic, vibrant and connected research organization, committed to producing high quality research outputs relevant to human health. We have 8 research institutes and 10 supported research centers and a growing number of specialized research groups and individuals undertaking world-leading research. As a research student, you will work closely with the University’s institutes and centers, ensuring you experience a vibrant research environment. Such valuable practical experience will help you achieve more in all aspects of your life and put you on the pathway to a rewarding, fulfilling and international career.

Pharmacology

What is the program about?
The program emphasizes advanced study and research in the mechanism of therapeutic agents and new drug evaluation in clinical trial. A variety of courses are provided to give students a systematic knowledge of molecular pharmacology and cell biology in current studies.

How long does the program last?
The three-year master’s program will be fully taught in English. Upon the completion of the program, graduates will earn a Master’s Degree of Pharmacology, recognized by the Ministry of Education of the People’s Republic of China.

Who is eligible to apply?
Applicants should have a bachelor’s degree in pharmacy or biology. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Molecular Pharmacology
- Drug Screening
- Immunobiology & Immunotoxicology
- Literature Reading and Writing
- Seminar of Progress in Drug Research
- Chinese Culture

Optional Courses
- Biopharmaceuticals
- International Pharmaceutical Regulations and Quality Control
- Advanced Organic Chemistry
- Bioseparation Technology
- Modern Pharmaceutics

Credit Requirements
The total credits for the program are no less than 30, in which no less than 18 credits are for compulsory (core) courses.

Master’s Thesis
In the third year, students must finish their master’s thesis, and defend it in the sixth term (in mid-May). They must work closely with their advisor to define a focused topic and conduct the research. Students should also be bold and actively engaged in research activities, and should publish at least one academic paper in journals.

Highlights of the Program
The school is a research leader with a strong reputation as a dynamic, vibrant and connected research organization, committed to producing high quality research outputs relevant to human health. We have 8 research institutes and 10 supported research centers and a growing number of specialized research groups and individuals undertaking world-leading research. As a research student, you will work closely with the University’s institutes and centers, ensuring you experience a vibrant research environment. Such valuable practical experience will help you achieve more in all aspects of your life and put you on the pathway to a rewarding, fulfilling and international career.

Fees
- Registration Fee: 400 RMB
- Tuition: 36,000 RMB/year
- Medical Insurance: 800 RMB/year

Contact Information
School of Pharmaceutical Sciences
Email: wangfanfan@sdu.edu.cn
zhenghua@sdu.edu.cn
Tel: +86-(0)531 88381148
http://www.pharm.sdu.edu.cn/english/
Pharmaceutics

What is the program about?
The program emphasizes advanced study and research in drug delivery, drug formulation, and new dosage form to be used in the market. A variety of courses are provided to give students a systematic knowledge of modern technology in pharmaceutics, studies on target drug delivery system and quality control.

How long does the program last?
The three-year master's program will be fully taught in English. Upon the completion of the program, graduates will earn a Master's Degree of Pharmaceutics, recognized by the Ministry of Education of the People's Republic of China.

Who is eligible to apply?
Applicants should have a bachelor's degree in pharmacy or chemistry. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Modern Pharmaceutics
- International Pharmaceutical Regulations and Quality Control
- Biopharmaceutics
- Literature Reading and Writing
- Seminar of Progress in Drug Research
- Chinese Culture

Optional Courses
- Drug Screening
- Biosynthesis of Natural Products
- Immunobiology & Immunotoxicology
- Organic Spectroscopy
- Advanced Medicinal Chemistry
- Advanced Organic Chemistry

Credit Requirements
The total credits for the program are no less than 30, in which no less than 18 credits are for compulsory (core) courses.

Master's Thesis
In the third year, students must finish their master's thesis, and defend it in the sixth term (in mid-May). They must work closely with their advisor to define a focused topic and conduct the research. Students should also be bold and actively engaged in research activities, and should publish at least one academic paper in journals.

Highlights of the Program
The school is a research leader with a strong reputation as a dynamic, vibrant and connected research organization, committed to producing high quality research outputs relevant to human health. We have 8 research institutes and 10 supported research centers and a growing number of specialized research groups and individual undertaking world-leading research. As a research student, you will work closely with the University's institutes and centers, ensuring you experience a vibrant research environment. Such valuable practical experience will help you achieve more in all aspects of your life and put you on the pathway to a rewarding, fulfilling and international career.

Fees
- Registration Fee: 400 RMB
- Tuition: 36,000 RMB/year
- Medical Insurance: 800 RMB/year

Contact Information
School of Pharmaceutical Sciences
Email: wangfanfan@sdu.edu.cn
zhenghua@sdu.edu.cn
Tel: +86-(0)531 88381148
http://www.pharm.sdu.edu.cn/english/

International Relations

What is the program about?
The program is to prepare the ground for those who would play the leading role in the fields of international relations, foreign affairs and other public policy fields under the background of globalization. Students will take a variety of courses, including International Relations Theory, Comparative Politics, Foreign Policy Analysis etc., which will also cover information related to China's actual conditions, especially China's foreign policy and relations with other countries.

How long does the program last?
The two-year master’s program will be fully taught in English and provides several research concentrations, like International Cooperation, Regional Studies (Europe, East Asia), International Security, Chinese Foreign Policy, and China and the World. Upon the completion of the program, graduates will earn a Master's Degree of International Relations, recognized by the Ministry of Education of the People's Republic of China.

Who is eligible to apply?
Applicants should have a bachelor's degree in political science, economics, law, education, history, or linguistics. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Comparative Politics
- International Relations Theory
- Major Issues in International Politics
- Foreign Policy Analysis
- Contemporary China Foreign Policy
- European International Relations
- East Asian International Relations

Optional Courses
- Sino-US Relations and the US Foreign Policy
- The International Strategy and Foreign Policy of Russia
- Introduction to Political Science
- Democracy: Theory and Practice
- Foreign Political System
- Environmental Policy
- Methodological Training of Political Science

Credit Requirements
The total credits for the program are no less than 30, of which no less than 18 credits are for compulsory (core) courses.

Master's Thesis
In the second year, the students must finish their master's thesis, and defend it in the fourth term (in mid-May). The students must work closely with their advisor to define a focused topic and conduct the research. Graduates should also be bold and actively engaged in research activities, and strive to publish papers in academic journals.

Highlights of the Program
Well-developed program and high degree of satisfaction in past years
An emphasis on leadership and multicultural team building
Flexible curriculum to accommodate candidates' personal career plans
Continuing education opportunities

Fees
- Registration Fee: 400 RMB
- Tuition: 32,000 RMB/year
- Medical Insurance: 800 RMB/year

Contact Information
School of Political Science and Public Administration
Email: tianmeng@sdu.edu.cn
Tel: 86-531-88377040
http://www.pspa.sdu.edu.cn
What is the program about?
The School of Medicine provides Master’s Programs both in Biomedicine and in Medical Science. It aims to offer a wide variety of comprehensive scientific knowledge to prepare students for further medical education or future medical careers, such as basic biomedical research, the pharmaceutical industry, or other health professions. Students will have opportunities to explore their own research interests through an in-depth study of relevant fields. The program is designed to enable students to integrate medical knowledge with analysis of general medical phenomena. Students are also expected to demonstrate a broad command of knowledge in research methods and experimental insights.

How long does the program last?
With the study duration of three years, the program is divided into two stages: course work and clinical internship / scientific research. Students for both master’s programs of biomedicine and medical science should finish first-year coursework. Based on their emphasis on research, they could select courses from a common curriculum system and complete at least 16 credits. They are also required to attend the frontier science forum organized by the school at least eight times, which can also be added to the total credit requirement. A qualification exam is set at the end of the first academic year. Only those who pass the exam are eligible to continue on with the program. They are also expected to finish master’s dissertation during the second or third year. Throughout the master’s program, students are free to participate in research activities in different departments of basic medicine and clinical medicine. Generally, the research activities are in forms of weekly seminars or small academic symposiums.

Who is eligible to apply?
Applicants should have a bachelor’s degree in biotechnology, cellular and molecular biology or medicine. Their English proficiency should enable them to take courses in English and communicate with their supervisors in English.

Program Courses
Clinical Neuroanatomy
Advanced Cell Biology
Advances in Molecular Oncologic Pathology and Translational Research
Identifying Human Disease Genes
Cell Signaling and Disease
Bioinformatics
Advanced Molecular and Cellular Immunology
Advanced Molecular Imaging
Molecular Mechanisms of Metabolic and Endocrine Diseases
Writing Biomedical Research Papers
Brain and Behavior Science and Practice
Advances in Combined Therapy of Malignant Tumors in General Surgery
Laparoscopic Surgery
New Concepts in the Diagnosis and Treatment of Diseases
Advances in the Pathogenesis, Diagnosis and Treatment of Hematological Malignancies
Identifying human disease genes
Basic Principles and Advances in Medical Molecular Biology

Graduation Requirements
Students are required to complete their dissertation on the basis of clinical practice and scientific research training and obligated to publish at least one piece of article related to their dissertation on official publications as primary author (Shandong University should be the primary institution) during the master period. After completion of the master’s programs, qualified candidates could be conferred master’s degrees in their specific research fields, such as Master of Physiology, or Master of Internal Medicine.

Highlights of the Program
Steadily increase of international student’s number while maintaining an excellent graduation rate;
Well-developed academic and management systems tailored for international students.

Fees
Registration Fee: 400 RMB
Tuition: 36,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
School of Medicine
Email: yjsb@edu.edu.cn
Tel: 86-(0)531 88382515
http://www.mbbs.sdu.edu.cn/class.php?class_id=46
What is the program about?
As one of the largest economic departments in China we offer unusually broad teaching and research expertise to our doctoral students. The Ph.D program consists of taught courses in the first and second years and is designed to provide a broad based training in theoretical and empirical research methods in Economics. All students are expected to gain a broad knowledge of the subject from graduate level course-work which complements the deeper knowledge gained from intense thesis research.

Majors available
Finance
International Trade
World Economy

Field of Study
Globalization and Chinese Economy

How long does the program last?
The four-year master’s program will be fully taught in English. Upon the completion of the program, graduates will earn a Master’s Degree.

Who is eligible to apply?
Applicants should have a master’s degree in economics. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
Microeconomics
Macroeconomics
Econometrics I & II
Review and Prospect of Chinese Economic Reforms
Hotspots Series of China’s Industrial Economy
Chinese Economy in Comparative Perspective

Elective Courses
Political Economy

Industrial Economics
Law and Economics
Financial Economics
Financial Investments
International Settlements
International Financial Management
Social Costs and Benefits: Theory and Methods
Ecological Economics
Environmental Economics
Informational Economics
Public Economics
Analysis of Public Policies
Financial Risk Management
Advanced Topics in Econometrics Application
Advanced Microeconomics
Game Theory and Information
Empirical Methods for Microeconomics
Research
Intermediate Public Economics
Lectures on Advanced International Finance
International Investment Theory
Institutional Economics
Labor Economics
Development Economics
Business Correspondence in English
International Business Negotiation
Principles of Management
Econometrics II
Fixed Income Securities
Corporate Finance
Principles of Financial Engineering
Advanced Macroeconomics
Advanced Econometrics
Comparative Financial System
Credit Requirements
The total credits required for the program are 20.
Thesis Requirements
In the last year, the students must finish their Ph.D’s thesis of no less than 100,000 words. The thesis should be submitted on time and defended during the last term.
Economics (Center for Economic Research)

What is the program about?
The Center for Economic Research was established in 2001 as an extension of the Property Rights Research Center founded in 1996. It is an economic research and talent development institution working under the sponsorship of Shandong University.
The program is designed for students who have knowledge of Economics or are interested in Economics. Through theories and practical applications, the program explores various courses including institutional economics, econometrics, experimental economics, law and economics, mathematical economics, financial economics, etc. Students acquire knowledge and skills through a combination of lectures, seminars and thesis.

How long does the program last?
The four-year Ph.D program is fully taught in English. Upon completion of the program, graduates will earn a Ph.D’s Degree in Economics, recognized by the Ministry of Education of the People’s Republic of China.

Who is eligible to apply?
Applicants should have a master’s degree in Economics or related areas. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
Advanced Macroeconomics
Advanced Microeconomics
Econometrics
Frontier Lecture
Professional English
Institutional Economics

Optional Courses
Selected readings of Frontier Literature
Game Theory
Law and Development
Ph.D students can take master’s optional courses as well.

Credit Requirements
The program requires a minimum of 19 credits, in which, Advanced Macroeconomics, Advanced Microeconomics, Econometrics, Professional English, Frontier Lecture and Institutional Economics are compulsory courses.

Thesis Requirements
Students can defend their dissertation in the third year, and students have to pass their dissertation to graduate.

Graduation Requirements
Before graduate students can be officially admitted to degree candidacy, they must satisfy the following requirements:
a. Minimum of 19 credits must be completed
b. Dissertation must be passed

Highlights of the Program
Teaching staffs of the Center for Economic Research possess doctoral degrees from famous universities in China and abroad. Most of them have worked or have had post doctoral stints in foreign universities for one year or more. Some researches of the center for Economic Research have ranked at the forefront of leading research in China.

Fees
Registration Fee: 400 RMB
Tuition: 32,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
Center for Economic Research
Email: jy_song@sdu.edu.cn, tianchuan@sdu.edu.cn
Tel: 0531-88364128, 0531-88363677
Materials Science and Engineering

What is the program about?
The program pays great attention to the cultivation of students' professional knowledge and engineering ability, covering a broad research field, such as:
a. Materials Science (metallic, ceramic, and polymer materials) to investigate the relationship between chemical composition-structure-processing and properties;
b. Materials Engineering (casting, plastic forming, and welding technologies) to shape the desired materials into parts or components with acceptable performance/cost ratio;
c. Materials Physics and Chemistry to research the chemical methods for synthesizing new materials or physical properties of functional materials; materials design and computational materials science are also available in this field;
d. Materials Packaging to investigate the packaging design, manufacture and mechanical test of industrial products.

This is an inter-disciplinary research field combining art design, materials processing and computer simulation.

How long does the program last?
The four-year Ph.D.'s program will be fully taught in English and provide several research directions. While Year One courses provide the fundamental knowledge of materials science and engineering, Year two and three is for project research and paper writing. The enrolled students may choose one of the school's research groups, and one faculty supervisor who has overseas experience of more than one year. Year four is for ending project and thesis writing. The enrolled students write thesis under the guidance of supervisor and conclude their project.

In the program core courses provide an essential knowledge of materials science and engineering, as well as recent progress in both new materials and new technologies. The optional courses, meanwhile, are of two modules based on the research direction, but students are encouraged to select inter-module courses. Upon the completion of the program, students will obtain a Ph.D Degree of Engineering, recognized by the Ministry of Education of the People's Republic of China.

Who is eligible to apply?
Applicants should have a master's degree in materials science and engineering as well as good English communication ability. Applicants may also be accepted:
1) who have a master's degree in physics or chemistry and have research experience related to materials science;
2) who have a master's degree in mechanical engineering and research experience related to materials processing.

Program Structure
Core Courses
- Essentials of Materials Science and Engineering
- Engineering Materials Technology
- Forefront talks

Optional Courses
- High performance composite materials science
- Multivariate Data Analysis
- Thermo-Physics of Welding
- Principles and Technologies of Welding
- Welding inspection and controlling
- Sheet metal forming: Theory and technology
- Theories and Technologies of Surface Engineering Sci. and Eng. of advanced polymers Advanced Ceramics
- New Methods for Polymer Synthesis

Credit Requirements
The total credits for the program are no less than 13, in which no less than 9 credits are for compulsory (core) courses.

Thesis Requirements
In the fourth year, the students must finish their Ph.D thesis, which is no less than 40,000 words in total, and defend it in the eighth term (in mid-May). The students must work closely with their supervisor to define a focused topic and conduct the research. Students should also be bold and actively engaged in research activities, and publish at least 2 papers in academic journals cited by SCI.

Graduation Requirements
Before graduate students can be officially admitted to degree candidacy, they must fulfill at least one of the following requirements:
a. publish 2 academic paper in relevant journals or academic conferences cited by SCI
b. participate in and complete an engineering project and submit a summary report
c. complete a phase of a development project and submit a summary report

Highlights of the Program
Faculty: 9, Staff: 153, Professor: 51, Associate Professor: 34, Ph.D. supervisor: 40

Subjects:
1x First-level national key subject
3x Second-level national key subjects
4x Key subjects of Shandong Province Labs
1x Key laboratory of the Ministry of Education
3x Key laboratories of Shandong Province
4x Engineering technology research centers of Shandong Province

Fees
Registration Fee: 400 RMB
Tuition: 34,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
School of Materials Science and Engineering
Email: liuyao@sdu.edu.cn
Tel: +86-(0)531 88382550
http://www.cmse.sdu.edu.cn/english/
Financial Mathematics

What is the program about?
The program provides the sound and serious mathematical training needed for financial mathematics, along with a profound knowledge of economics and other related fields. Students will take a variety of courses, covering mathematical training, elementary finance, empirical, theoretical and computational tools, quantitative analysis techniques in data analysis, signal processing and statistical decisions, etc. The graduates will achieve excellent research ability so that they can make some creative results in this field.

How long does the program last?
The four-year Ph.D program will be fully taught in English. If a Ph.D student meets the graduation requirements and publishes one more SCI/CSSCI papers, he/she can graduate a year earlier. Upon the completion of the program, graduates will earn a Ph.D of Mathematical, recognized by the Ministry of Education of the People’s Republic of China.

Who is eligible to apply?
Applicants should have a master’s degree in mathematics. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experience can be provided.

Program Structure
Core Courses
- Advanced Probability Theory
- Advanced Mathematical Statistics
- Financial Mathmatics
- Stochastic Processes
- Linear Models
- Backward Stochastic Differential Equations
- Application

Optional Courses
- Stochastic Control and Its Applications
- Time Series Analysis
- The Theory of Derivative Security
- Stochastic Computing
- Mathematical Economics

Nonparametric Statistics
Nonlinear Probability
Credit Requirements
The total credits for the program are no less than 13, in which no less than 12 credits are for compulsory (core) courses.
Ph.D Thesis
In the last year, students must finish their Ph.D thesis, and defend it in the last term. They must work closely with their advisor to define a focused topic and conduct the research.
Graduation Requirements
Firstly, graduates should meet the credit requirements. Secondly, graduates should achieve the Ph.D thesis requirements. Thirdly, as first author, a Ph.D student should publish two papers in SCI/CSSCI journals, or one paper in SCI/CSSCI II journals, or two papers in EI top journals for special majors during the study period.

Highlights of the Program
a. Top 3 mathematics & top 8 statistics in Mainland China according to CDR2012 approved by the Chinese Ministry of Education;
b. Leading scientist: Peng Shige, a world-class mathematician as well as the founder of financial mathematics in China;
c. Numerous cooperative financial institutions, e.g. China Financial Futures Exchange, Qilu Securities;
d. First-rate hardware facilities;
e. Abundant practice opportunities;
f. Brilliant career prospects

Microbiology

What is the program about?
The mission of the Ph.D program in Microbiology in the School of Life Sciences is to train its students to become highly competent professionals in Microbiology research and its related industries.

How long does the program last?
For full-time Ph.D students, the regular duration of the program is four years. Early graduation can be granted for students who have fulfilled the requirements of graduation and also have stayed in the program for at least three years.

Who is eligible to apply?
All students who have got their Master’s Degree are eligible to apply.

Program Structure
Core Courses
- Seminars on Advanced Science Proposal training
- Progress in Microbiology
- Reading and literature review
- Optional Courses
- Technical Writing in English
- Topics in Plant Molecular Genetics
- Evolution Biology

Credit Requirements
The total credits should be no less than 14, including 12 credits on compulsory courses and 2 credits on Elective courses. A dissertation course includes extracurricular literature reading.

Thesis Requirements
The doctoral degree dissertation should be written following “The Uniform Requirement of Format for Graduate-level Theses in Shandong University”. The length of the doctoral degree dissertation should be between 30,000 and 100,000 words. The length of the abstract should be above 3,000 words. The dissertation should have reliable data, should be written professionaly, should be written in smooth language, and should bear appropriate and reasonable analysis.

Graduation Requirements
Graduation requires the publication of either one paper ranked in or above zone 2 according to The Chinese Academy of Science SCI Journal Ranking Table or two papers categorized as SCI. In either case, the Ph.D student serves as the independent first author (i.e. excluding co-first authorship).

Highlights of the Program
Highlights of the Programs in Microbiology and microbial technology studies at Shandong University are characterized by:
(1) microbial resources and associated applied & basic researches;
(2) genomic and metabolic engineering;
(3) environment and industry associated microbial technology.

Fees
Registration Fee: 400 RMB
Tuition: 34,000 RMB/year
Medical Insurance: 800 RMB/year

Contact Information
School of Life Science
Email: sxnan@sdu.edu.cn
Tel: +86-(0)531 88364522
http://www.lifesci.sdu.edu.cn/index.aspx
Mechanical Engineering

What is the program about?
The program emphasizes the advanced study and research in mechanical engineering, including machining, NC, intelligent detection, design, mechatronics, and manufacturing automation, providing a broad and deep background in mechanical manufacture and automation.

How long does the program last?
Generally, the program lasts three to six years.

Who is eligible to apply?
Applicants should have a master’s degree in mechanical engineering or a relevant field. Admission of candidates who do not meet this criterion may be approved if satisfactory evidence of postgraduate study, research or professional experiences can be provided.

Program Structure

Core Courses
- Technical writing
- Advanced Manufacturing Technologies Seminars
- Powder Metallurgy Science
- Elasticity and plasticity
- Multi-disciplinary Modeling for Advanced Machining Technologies
- Digital Control System Analysis and Design
- Finite Element Method

Optional Courses
- Metal cutting principles & Cutting Tool Technology
- Engineering Fracture Mechanics
- Advanced Optical Fabrication
- Advanced Mechanical Behavior of Materials
- Engineering mathematics
- Professional practice
- Modeling, Analysis, and Simulation of Mechatronics System
- Mechanical Vibration
- Modern CNC Technology
- Man-Machine Engineering
- Green Manufacturing and Remanufacturing

Credit Requirements
The total credits for the program are no less than 13, in which no less than 12 credits are for compulsory (core) courses.

Dissertation Requirements
Doctoral dissertation should reflect the advancement of his study field. Doctoral candidates are encouraged to choose international frontier subject or hotspot problem from the national research projects or engineering practical subject.

Graduation Requirements
Two papers are published as the first author in EI source journals (EI retrieval for JA type) and SCI source journals, in which at least one published in SCI source journals.

Highlights of the Program
State-of-art facilities
High Degree of Students Satisfaction
Leaders in high speed machining
Flexible teaching requirements

Fees
Registration Fee: 400 RMB
Tuition: 34,000RMB/year
Medical Insurance: 800RMB/year

Contact Information
School of Mechanical Engineering
Email: yangzhitian@sdu.edu.cn
Tel: 86-531-88392118
http://www.mech.sdu.edu.cn/en/

Online Application
www.apply.sdu.edu.cn

Time of Enrollment
Degree Programs : September
Visiting Student Program : Open for application all year

Scholarships
Scholarships available to reward distinguished students and assist financially challenged ones.
Chinese Government Scholarships
Hanban / Confucius Institute Scholarships
Confucius Chin Studies Plan
China Development Bank (CDB) Scholarships
Distinguished Student Scholarships
Excellence Scholarships for Self-financed Students

Contact Information
International Admission Office
Department of International Affairs
Email: admission@sdu.edu.cn
Tel: +86-(0)531 88364854
Fax:+86-(0)531 88565051
http://www.istudy.sdu.edu.cn