

2019

BIT

International
Semester



北京理工大学
BEIJING INSTITUTE OF TECHNOLOGY



Introduction

Beijing Institute of Technology (BIT) is one of the top science and technology universities in China which Offers a high-level education for degree and language study. With many strong and prestigious science and technology programs to choose from, you will receive quality education. School of Mechanical Engineering (SME), as one of the schools who have the longest history and the largest scale, is playing a leading role in mechanical engineering in China.

International Semester at BIT will provide you with a truly exceptional experience in China. The semester includes three components: academics courses of advanced technology improvement in mechanical engineering and vehicle engineering and Chinese language, culture tours and internship.

- **Academics courses:** Learning-based Autonomous Vehicles (3 credits), Energy-saving and new energy vehicle technology (3 credits), Advanced Vehicle Technology (3 credits), Chinese Language (2 credits) and Chinese Culture Practice (1 credit). Based on the course arrangement, students can also take elective courses.
- **Culture tours:** Chinese historical visits (e.g. the Great Wall, the Forbidden City, Summer Palace, etc.)
- **Internship:** Students will have the opportunity to visit well-known companies in China and take internships there to work with Chinese counterparts.

Your choice of BIT will be rewarded with a wonderful university experience. We look forward to welcoming you here in Beijing!



Courses



(1) Learning-based Autonomous Vehicles

In this course, a brief introduction to autonomous vehicles and fundamental self-driving technologies in terms of sensing, environmental perception, decision making, path planning and motion control will be given. Moreover, some state-of-the-art technologies of machine learning, reinforcement learning in particular, that can help to make a smart autonomous vehicle will also be introduced.

Class Hours: 48

Credit: 3

(2) Energy-saving and new energy vehicle technology

Through the study of this course, students can master the background, technical overview and trends of energy-saving and new energy automotive technology development and master the composition, principle and technical key of battery electric vehicles and hybrid vehicles with comprehensive understanding on control and energy management theory. Further, this course aims to help students establish systemic view on the principle and design method power battery and its management system, electric drive system, electric auxiliary system, in-vehicle network and inter-vehicle network, development approach of chassis controller and Electromagnetic Compatibility technologies of energy-saving and new energy vehicles.

Class Hours: 48

Credit: 3

(3) Advanced Vehicle Technology (3 credits)

This course aims to meet the rapid vehicle and power machinery technology development, expand the academic horizons for graduate students, and lay a solid foundation for research and work in the future. The topics will introduce a large number of relevant examples combining research experience, which can greatly stimulate interest and enthusiasm of graduate students in the scientific research as well as improve their innovative capacity. This course includes three modules: Advanced Vehicle Technology、Advanced Power Machinery Technology and Technical Seminar.

Class Hours: 48

Credit: 3

(4) Chinese Language

The beauty of Chinese Language is in both its form and context. This course will bring a brief introduction to some commonly used sentences in daily life such as greetings, shopping, ordering, self-introduction, etc. Besides, the course will pay concentrate on training students' abilities of listening, speaking, reading and writing skills which is of great importance to explore the profound connotation of Chinese and enjoy its beauty.

Class Hours: 32

Credit: 2

(5) Chinese Culture Practice

In the Culture Practice, so many enjoyable programs will be arranged which can help students have a slight acquaintance with Chinese traditional Culture. The teaching pattern combines lectures and cultural practice. Students will practice Kungfu to comprehend the wisdom of fight for peace and understand the beauty of Chinese Characters by taking the course of Calligraphy. In addition, learning classic Chinese songs to experience the delicate emotions and getting to know how to make paper-cut that contains people's ideals for happiness will also be introduced to students. There is a possibility that the programs will be rearranged according to the actual situation.

Class Hours: 16

Credit: 1



How to apply

(1) Qualifications:

- Second-year in university or above
- Full-time registered university students
- Mechanical and Vehicle Engineering academic background

(2) Required Application Materials:

- Transcripts at home university (English version with signature and/or seal by home university)
- One letter of recommendation by home university professor
- Statement of Purpose clearly indicating duration and purpose of study, preferred technical work or experience and academic background
- Photocopy of Passport
- ID Photo

(3) Application Procedures

- Register at: <http://apply.isc.bit.edu.cn>
- Choose: Exchange Program
- Undergraduate choose: general visiting student(self-sponsored)
- Postgraduate choose: senior visiting student (self-sponsored)
- Upload the Required Application Materials
- If you are admitted after documents evaluation, BIT will send you an Admission Notice and JW202 Form by mail.

(4) Application Time: October 15th, 2018 to December 31st, 2018

(5) Teaching Language: English

(6) Duration: February to June, 2019, 16 weeks





Fees and Scholarship

(1) Fees

- Tuition fee waived
- Program fee: USD 3000/person including application fee, accommodation (on-campus and internship site), insurance, transportation and tickets of culture tours, materials of Chinese culture classes.

(2) Scholarship

- BIT offers scholarship (USD 2000) to students from partner universities and students are required to pay the rest of USD 1000.

Contact Us

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