

# XI'AN JIAOTONG UNIVERSITY ENGLISH-TAUGHT INTERNATIONAL UNDERGRADUATE PROGRAM IN ENERGY AND POWER ENGINEERING

Xi'an Jiaotong University (XJTU), established in 1896, is a national key university directly administered by the Ministry of Education of China. It is one of China's top ten research universities and a member of C9 League—China's Ivy League. In 2013, XJTU was awarded by the Ministry of Education of China as the **"Demonstration Base for International Education"** due to its outstanding performance in international student education. It was ranked No. 10 on the 2024 Shanghai Ranking of Chinese Mainland. The Energy and Power Engineering program originated from the Power Group of the Mechanical Engineering Department established at Jiaotong University in 1921 and was then founded in the 1950s. It is the earliest program in China to cultivate talents in energy and power fields with the most comprehensive range of specializations. It has pioneered multiple specializations within China's energy and power sector, and its professional status and comprehensive strength RANK FIRST in China, enjoying a high reputation internationally as well.



#### 1. Objectives

To cultivate innovative talents, the program provides a solid foundation in mathematics and physics, a comprehensive theoretical basis in power engineering and engineering thermo-physics, and systematic knowledge of efficient, clean energy conversion and utilization, as well as energy and power equipment and systems. In 2022, the Energy and Power Engineering program passed the engineering education professional certification, providing graduates with an international "ID card" for further studies and work practices worldwide.

#### 2. Highlights

Our undergraduate talent cultivation system can adapt to the trend of broad-based talent cultivation, respect students' individualized development, and accommodate the needs of industrial transformation and upgrading.

#### 3. Curriculum

*Basic courses of major categories:* Engineering Mechanics, Elements of Materials Engineering, Engineering Drawing, Fundamentals of Machine Design, Electrical Engineering and Electronic Technology, Experiments of Electronics and Electrotechnics, Principles of Automatic Control, Engineering Thermodynamics, Heat Transfer, Fluid Mechanics, Combustion, Introduction to Energy and Power Engineering Science and Technology, Experiment of Thermal and Fluid Science, Measurement Techniques in Thermal Energy and Power Engineering *Major courses:* Principles and Technologies of Modern Electric Power Generation, Advanced Refrigeration and Cryogenic Technology, Principles and Applications of Energy Storage, Supercritical Water Application in Energy and Environment, Low-carbon Energy Utilization Technology and Sustainable Development, Introduction to Applications of the Computational Fluid Dynamic Software, Hydrogen and Fuel Cells, Thermophysical Properties of Working Fluids: Their Correlation, Prediction, and Estimation

#### 4. Internship and Employment

Student internships primarily take place at leading enterprises in China's energy and power sector, such as Shenyang Blower Works, Shanghai Turbine Company, Dongfang Electric Corporation, BYD Auto, and TBEA. Graduates are mainly active in the energy, electric power, power engineering, petroleum, chemical, compressor, and refrigeration industries. They can be capable of engaging in scientific research, engineering design, technology development, operation control, and technical and economic management in the field of energy and power engineering and related areas.

## **PROGRAM MAJORS**

School	Program	Teaching Language	Duration	Type of degree awarded	Tuition Fees (RMB/Year)
School of Energy and Power Engineering	Energy and Power Engineering	English	4 years	Bachelor of Engineering	180,000

### ELIGIBILITY

- 1. 18-25 years of age & with good health status, holding valid foreign ordinary passport;
- High school / senior secondary or advanced diploma (Applicants who are still in the last year of high school can provide the expected graduation certificate for applying while the official diploma must be provided before Sep 1st, 2025 upon enrollment);
- Language skills: Submit English proficiency certificate. IELTS 6.0 or TOEFL 80 or Duolingo English Test 110 (or

# **APPLICATION DEADLINE**

The Deadline to submit the online application is May 31, 2025

above), or other equivalent English proficiency certificates recognized by our university are accepted. Native speakers of English can be exempted from the corresponding language proficiency certificate after being recognized by our university.

4. Comply with the regulations of the Ministry of Education's document. [2020] No.12 and the relevant regulations of our university.



## **CONTACT INFORMATION**

Address: Admission Office, School of International Education (A907/ A909 Yi Fu Foreign Language Building) Xi'an Jiaotong University, No. 28 Xianning West Road, Xian City Shaanxi Province, 710049, P.R. China Email: adm-sie@xjtu.edu.cn Tel: +86 29 82665924 For more information, please scan the QR code:

