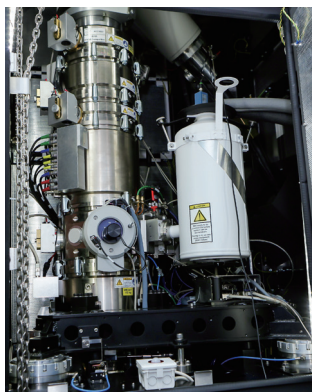


ground, there is also an electron microscope with a resolution of up to Guinness World Records underground, allowing you to see crystal cells and atoms that usually only exist in journals. Multiple fields and disciplines intersect here, and the "M-Talents" summer school takes you to experience the cutting-edge and most fashionable laboratories of the School of Materials Science.



## Research institute and enterprise visits



BGI has an internationally leading research and development laboratory for graphene materials, devices, and applications.

BOE is a leading innovative enterprise in the Internet of Things, providing smart port products and professional services for information exchange and human health. It has formed a "1+4+N+ecological chain" business architecture with semiconductor display as the core, integrating IoT innovation, sensors and solutions, MLED, and smart medical industry.

## The charm of Chinese language and culture

Splashing ink and painting, mindfulness between heaven and earth. The strokes are powerful, and every calligraphy stroke carries the excellent traditional Chinese culture, containing rich aesthetic theories. After listening to the cultural explanations related to calligraphy, the students personally experienced how to use the Four Treasures of the Study to write their calligraphy works. The name engraved on the seal is forcefully knocked onto the printing mud and then printed on the fan, adding a bright red color to the calligraphy of white paper and black characters.



Chinese ethnic musical instruments have a long history and a long history, and they always maintain a unique charm and mystery. Many unique ethnic musical instruments have been passed down from ancient times to the present. These instruments have their unique timbre, structure, and performance methods, representing the rich and diverse music culture of China.

## Campus tours and culture excursions



Yanyuan is adjacent to Yuanmingyuan to the north and facing the Summer Palace to the west. It was built on the basis of the "nine major gardens" of the Ming and Qing royal gardens. For hundreds of years, Yanyuan has grown with Peking University, made progress with China, and shared destiny with the times, making it a rare historical heritage. Teaching assistants help students quickly familiarize themselves with the

campus environment, gain a deeper understanding of Peking University history, and experience the unique scenery of Yanyuan up close.

The Forbidden City of Beijing is a model in the development history of ancient Chinese palace cities and is the largest and most preserved ancient palace architectural complex in the world. Under the guidance of the teacher, the students visited the iconic buildings of the Forbidden City, witnessed the long history of the Chinese nation and the crystallization of Chinese cultural traditions, and expressed great shock.



# PEKING UNIVERSITY "M-TALENTS" SUMMER SCHOOL

Most Interesting  
Most Informative  
Most Talented







## 1/ About Peking University

Peking University (PKU) is a comprehensive research university with disciplines ranging from philosophy, literature, history, law, economics, and education to science, engineering, medicine, management and art. Peking University is dedicated to educating innovation-minded scholars with a global perspective and understanding of China.

## 2/ About the School of Materials Science and Engineering



Ranking

ESI top 1.4‰

US News 6<sup>th</sup>

QS 15<sup>th</sup>

The materials department of Peking University was established in 2005 and now has been ranked top 1.4‰ of ESI, the 6<sup>th</sup> of US News, the 15<sup>th</sup> of QS by subject in the world.

MSE emphasizes research for subjects in Energy Materials, Optoelectronic Materials, Biomaterials, Composite Materials, and Emerging Materials. We warmly welcome talented international students to join us!

## 3/ Outline of “M-Talents” Summer School

### • Overview of “M-Talents” Summer School

In order to expand student exchange with international partner universities, the School of Materials Science and Engineering, Peking University (PKU) launched the “M-Talents Summer School” program in 2023, offering premium courses and institute tours related to materials science, advanced engineering, etc, to overseas undergraduates from all over the world. This program will provide extensive and in-depth Chinese-foreign cultural exchange events and cultural activities.

### • Courses offered

- 1) Lectures on frontier discipline and laboratory visits
- 2) Research institute visits and exchanges
- 3) Enterprise visits and workshops
- 4) Elementary Chinese language course
- 5) Culture excursions

### • Language

English and Chinese

### • Period

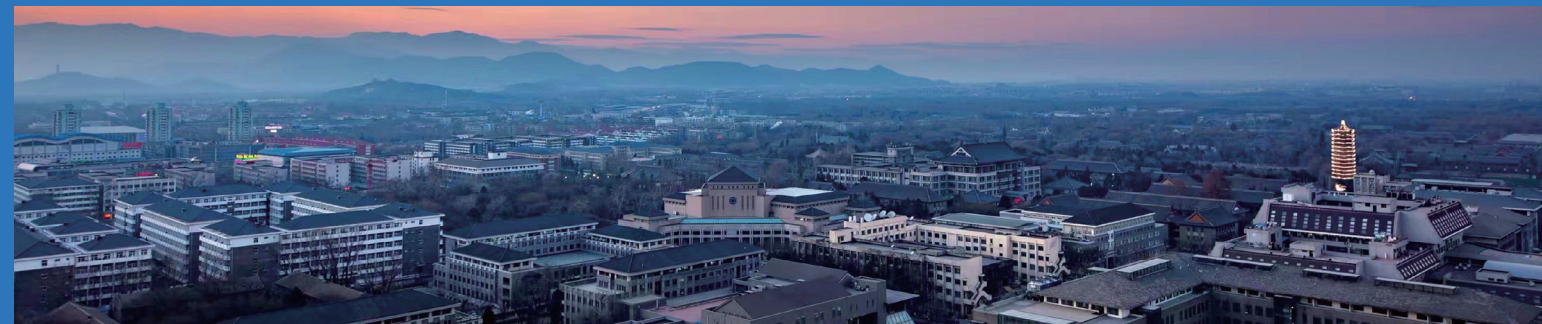
Application: early May to late May.  
Course: about 7-10 days in middle of July.

### • Students capacity

About 50 overseas students can be accepted, of which 20 are scholarship students and 30 are self-funded students. At the same time, about 10 Peking University international students participate together.

### • Program fee

- US\$ 600 for self-funded students.
  - US\$ 100 for scholarship students.
- The above fees exclude air ticket expenses. Accommodations in Beijing (double room), registration, meals, courses, cultural excursions and social activities are included in the program fee. Peking University



students do not need to pay fees, but accommodation and meals need to be borne by themselves.

### • Supporting companies

Beijing Graphene Institute (BGI), BOE Technology Group Co., Ltd, Huawei Technologies Co., Ltd, BYD.

## 4/ Application

### • Eligibility

- Applicants must be a senior undergraduate or master's student with a background in science and engineering.
- For English-taught programs, applicants whose mother tongue is not English are required to submit TOEFL, iBT (90 points or above) or IELTS (6.0 points or above) scores or other certificates to prove their English language proficiency.
- For Chinese-taught programs, applicants whose mother tongue is not Chinese are required to submit HSK 4 (200 points above) scores or other certificate to prove their Chinese language proficiency.

### • Application deadline and other information

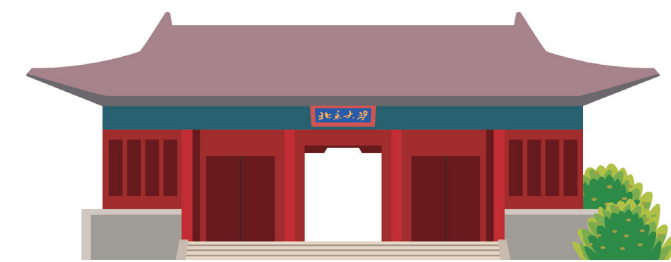
Please refer to the following website: <https://www.mse.pku.edu.cn/en/index.htm>

We are there to give you guidance and support before and during your stay at MSE and look forward to welcoming you!

Tel: (+86-10)62756697 Email: [pkumse@pku.edu.cn](mailto:pkumse@pku.edu.cn)



## 2023 PEKING UNIVERSITY “M-TALENTS” SUMMER SCHOOL



## Interdisciplinary Lectures

### 1.1 Cultural relic protection, integration of ancient and modern materials

“Materials and Archaeology” is an important direction for studying history and culture, which involves the use of scientific technology to analyze, explain, and understand the material composition and production techniques of archaeological sites, relics, etc. Advanced



technologies in materials science, such as spectroscopy, microscopy, and radioisotope analysis, are of great significance for archaeological research and cultural relic protection. By combining knowledge from archaeology and materials science, we can provide new perspectives and tools for decoding past history.

### 1.2 Amazing Carbon Materials

From the Bronze Age to the Iron Age and then to the modern semiconductor age, the development of materials science is closely linked to the progress of the times. Therefore, materials science is essential to promote social development and technological progress.



### 1.3 Application of indocyanine green in general surgery

Materials science plays a crucial role in fields such as drug delivery systems, medical devices, and medical imaging. For example, the latest medical technology - tissue engineering. It is a technology that uses



biomaterials as the foundation and combines cells and bioactive molecules to create, repair, or replace damaged tissues or organs. The research prospects are promising and may completely change the way we treat diseases and injuries.



## Lectures on frontier discipline

Materials science involves multiple disciplinary fields. It is not only the material foundation of various technologies in science and engineering, but also an important disciplinary element in medicine and economics.



## Laboratory visits

Here, you can see the instruments, equipment, and experimental environments of many leading research groups in the School of Materials Science, allowing you to experience and experience the research atmosphere of the laboratory firsthand, bringing new insights and cognition to future research life. In addition to the laboratory above