



中国工程师联合体  
CHINESE SOCIETY OF ENGINEERS



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the official website

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# COMPETENCY ASSESSMENT FOR ENGINEERS BOOKLET

## What is Engineering Competency Assessment?

Engineering competency assessment is a third-party social talent evaluation conducted nationwide for engineering and technical talents by the Chinese Society of Engineers (CSE) and authorized societies. This assessment, under the General Specification of Competency Assessment for Engineers and relevant professional standards in engineering and technology fields and based on peer review, focuses on evaluating competency and performance through material reviews, written tests, and oral interviews.

## What is a CSE Engineer?

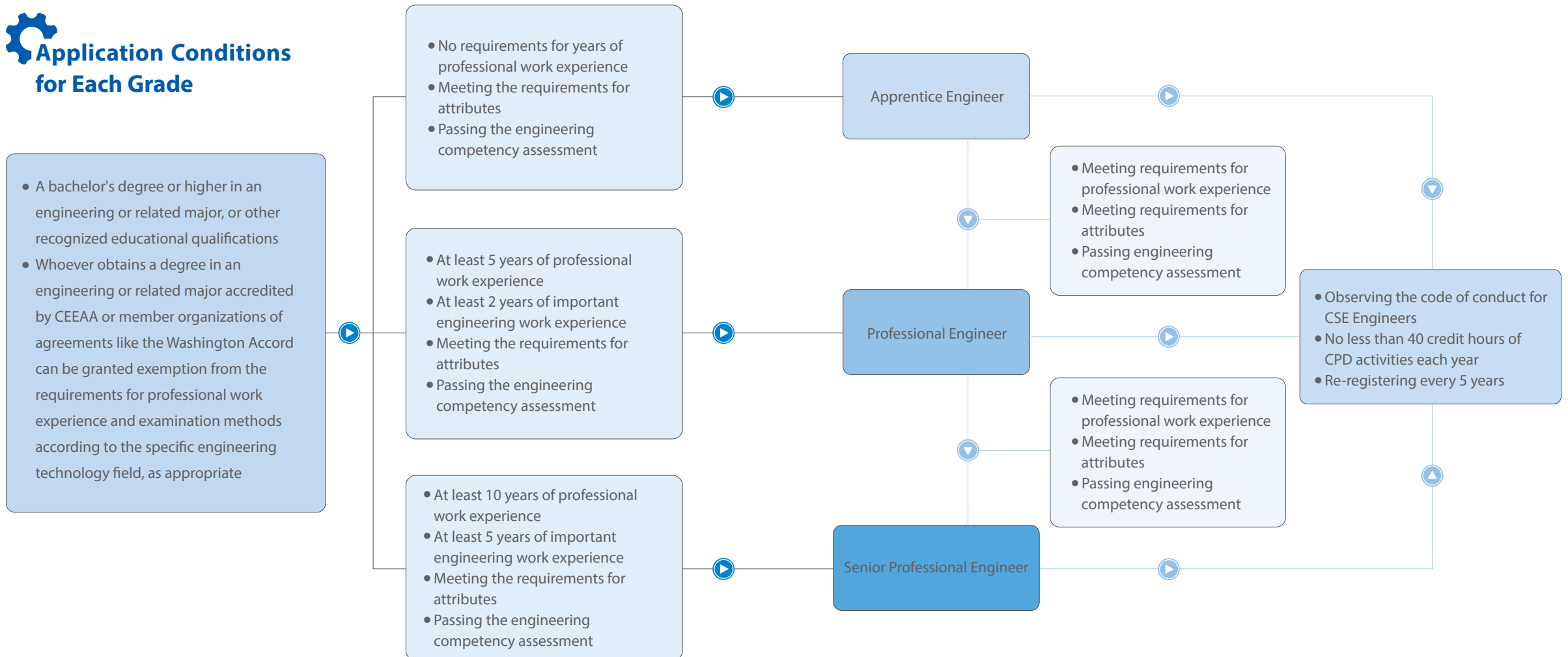
A CSE Engineer is a person who has passed the engineering competency assessment, registered with an authorized society and obtained the CSE Engineer certificate and corresponding engineering membership.



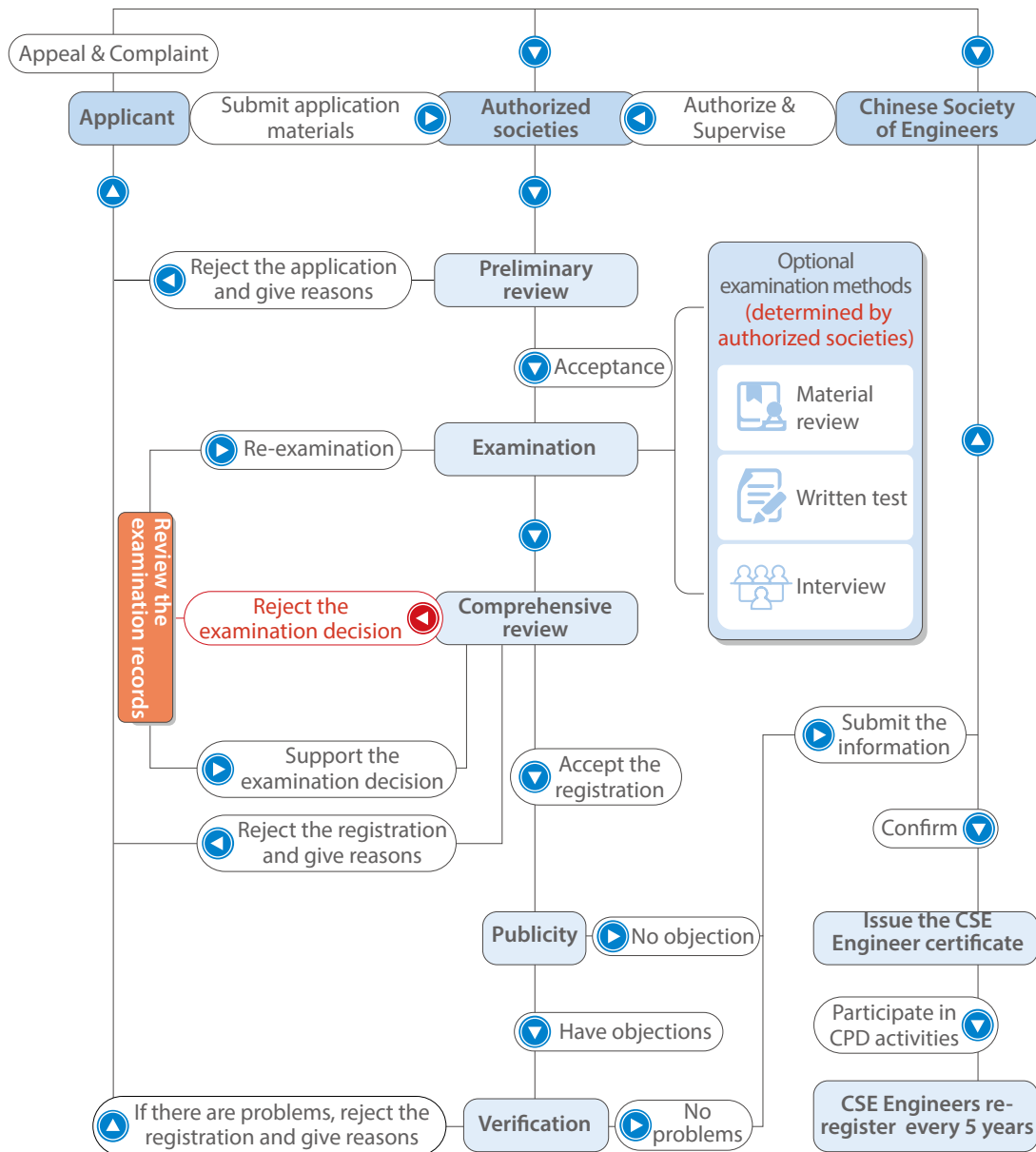
## Grades of CSE Engineers



## Application Conditions for Each Grade



## Engineering Competency Assessment Procedures



## Functions of CSE Engineer Certificates

- The "passport" for global mobility**  
 Proving the holder has met the competency/essential requirements for international mutual recognition of engineers qualifications and facilitating his/her global mobility.
- The "business card" recognized by the industry**  
 Showing the holder's competency has been recognized by authoritative academic organizations in the industry and helping enhance his/her reputation.
- The "benchmark" of engineering competency for enterprises**  
 Serving as a benchmark of talent appraisal for employers in the industry to recruit suitable talents when the holders practice across regions/enterprises.

## Example CSE Engineer Certificates



## Value of CSE Engineers

### For applicants

- Their engineering competency will be recognized by CSE and authorized societies;
- Have priority access to CPD resources offered by CSE and authorized societies to improve their engineering technology competency and attributes;
- Stand a chance of becoming an assessor for administrating engineering competency assessments in corresponding engineering technology fields;
- Have more opportunities to partake in Chinese/global exchanges, conferences and activities in corresponding engineering technology fields;
- Have the potential to obtain practice qualifications of a country/region through simplified procedures after CSE enters into agreements on mutual recognition of engineers qualifications with relevant engineering organizations in that country/region.

### For enterprises

- Effectively enhance their global influence;
- Facilitate their talents' cross-border mobility;
- Assist them in growing international business;
- Enhance their core competence bolstered by excellent engineering and technical personnel.

### For universities

- Keep their educational ideas aligned with global ones and meet the requirements for cultivating international engineering and technical talents;
- Ensure faculty members are experienced in engineering practice and boost talent training quality;
- Create more chances to exchange with Chinese and foreign peers in engineering technology education.

## International Cooperation

### Cooperation in engineers' capacity building



Concluded the Memorandum of Cooperation between Thailand and China on the Competence Assessment and Management of Architects with the Architect Council of Thailand (ACT) on November 3, 2018.



Concluded the Agreement to Promote Cooperation and Engineers Capacity Building with the Pakistan Engineering Council (PEC) on November 8, 2019.



Concluded the Minutes of Meeting in Engineering Capability with the Council of Engineers Thailand (COET) on November 22, 2018.



Signed the MoU to Promote Cooperation on Engineers' Capacity Building with the Institution of Engineering and Technology (IET) on January 20, 2021.

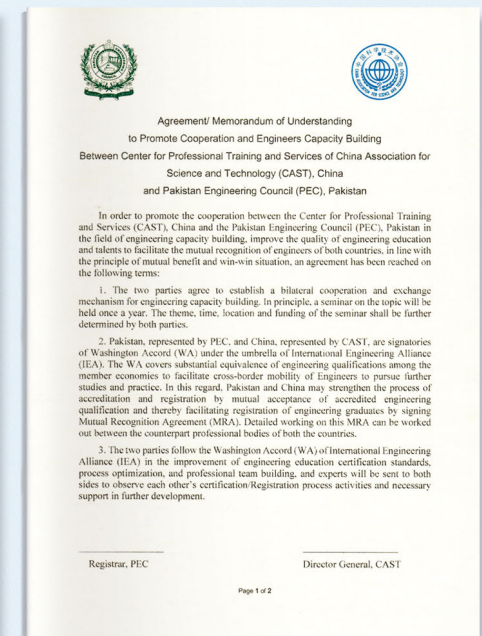
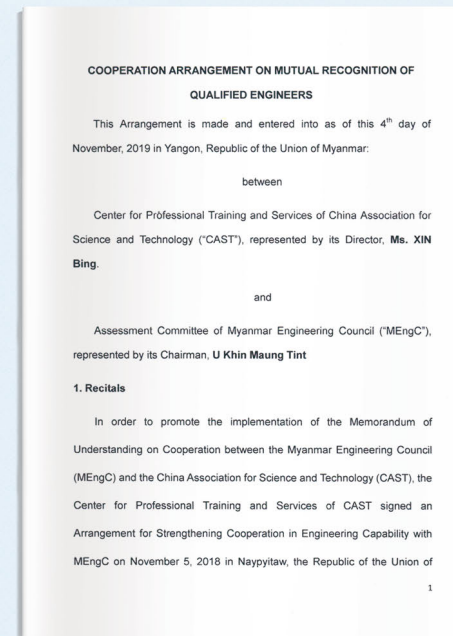


Signed the Cooperation Agreement on Mutual Recognition of Qualified Engineers with the Myanmar Engineering Council (MEngC) on November 4, 2019.



THE INSTITUTION  
OF ENGINEERS,  
SINGAPORE

Concluded the Agreement for Mutual Recognition of Professional Engineer and Senior Professional Engineer/ Chartered Engineer and Senior Chartered Engineer with the Institution of Engineers Singapore on June 30, 2022.



International mutual recognition of engineers qualifications



The CPTS-CAST signed the Cooperation Agreement on Mutual Recognition of Qualified Engineers with the Myanmar Engineering Council (MEngC) on November 4, 2019. Since then, CSE Engineers may be registered as Registered Limited Professional Engineers directly with MEngC. This is the first bilateral agreement on mutual recognition of engineers qualifications concluded between CAST and a foreign engineering organization after CAST joined the Washington Accord.

The MoU to Promote Cooperation on Engineers' Capacity Building concluded with the Institution of Engineering and Technology (IET) on January 20, 2021 helps to extend engineering capacity building cooperation from developing countries into developed ones. It also supports boosting the capacity of engineers of both sides, advancing mutual recognition of engineers qualifications, and facilitating China's entry into the International Professional Engineers Agreement.



The CPTS-CAST concluded the Agreement for Mutual Recognition with the Institution of Engineers Singapore (IES) on June 30, 2022. Professional Engineers/Senior Professional Engineers registered with the CSE may be registered as Chartered Engineers/Senior Chartered Engineers with the IES. This is the first bilateral agreement on mutual recognition concluded between CAST and a member of the multilateral agreement for recognition of engineering competency, showing the Chinese engineering competency assessment system has been recognized by a key member of the multilateral agreement.

## Congratulations from global engineering organizations



Washington Accord (WA): The vision of CSE to disseminate engineering knowledge, advance engineering culture, recognize excellence in engineering and technology, serve the professional development of engineers, and promote the mutual recognition of engineering qualifications internationally aligns with the vision of Washington Accord signatories and underpins our collective efforts.



International Professional Engineers Agreement (IPEA): The International Professional Engineers Agreement looks forward to welcoming CSE into the international community of engineers working towards the advancement, collaboration and mobility of the profession.



Federation of Engineering Institutions of Asia and the Pacific (FEIAP): The friendly cooperation between FEIAP and CAST in the past can serve as a solid base for the future collaboration between CSE and FEIAP, which is destined for fruitful results.



The Federation of African Engineering Organisations (FAEO): As FAEO we trust that CSE will spare no effort to contribute to the international engineering community, global economic and social development, and the sustainable development goals (SDGs) of the United Nations.



Engineers Australia (EA): The proposed scope of activities for CSE align well with EA, particularly with respect to contributing to the international engineering community and the United Nations Sustainable Development Goals.



Institutions of Engineers, Malaysia (IEM): IEM, CAST and CSE will continue to play our role in connecting and uplifting the development of the engineering profession. IEM looks forward in strengthening the cooperation with all of you.



Russian Union of Scientific and Engineering Associations (RUSEA): Будем оставаться надежными и верными коллегами и единомышленниками и надеюсь на продуктивное сотрудничество, как с CAST, так и с его новым членом - Китайским обществом инженеров!



American Society of Mechanical Engineers (ASME): ASME looks forward to working with CSE to serve engineers globally and share our missions to address humankind's global challenges.

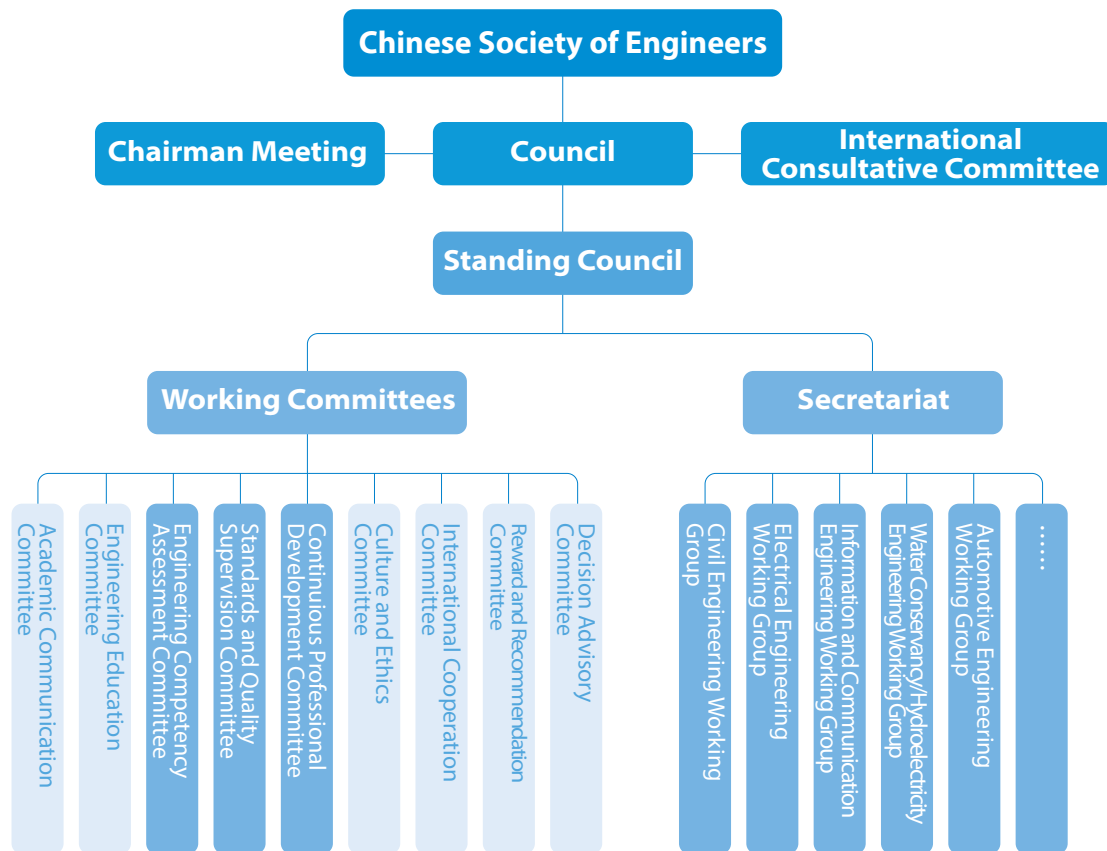


German Federation of Technical-Scientific Associations (DVT): In the spirit of this fruitful collaboration, we wish CSE and CAST success and look forward to a continued and intensified cooperation.



## About Engineering Competency Assessment System

### Organizational structure



The CSE's scope of activities, under the Regulations of the Chinese Society of Engineers (CSE), includes "conducting engineering competency assessments and boosting continuous professional development", "advancing the mutual recognition of engineers qualifications internationally" and many others. The three working committees under the CSE, viz. Standards and Quality Supervision Committee, Engineering Competency Assessment Committee and Continuous Professional Development Committee, and several professional working groups under the Secretariat are responsible for different elements of engineering competency assessment respectively.

### Standards

The "1+X" standard system of engineering competency assessment featuring "general specification + professional specifications" has been recognized by engineering organizations in Thailand, Myanmar, Pakistan, Singapore and other countries. And the mutual recognition of engineering competency assessment standards with substantial equivalence has been achieved via executed agreements.



## Regulations

By formulating regulation documents in terms of professional specification development, authorization of assessment qualifications, registration management of engineering members, certificate management, management of continuous professional development, work supervision and administration, and assessor management, CSE develops quality guarantee systems for the whole process of engineering competency assessment, with a view to perfecting regulations, standardizing processes and maintaining high quality.



## About CSE



CSE was jointly initiated by 82 entities, including national societies, local institutions of engineers, universities, and enterprises, at the request of CAST. It was officially founded on March 18, 2021.

### Vision

CSE aims to promote the career development and value realization of engineers, serve economic and social development, and therefore enhance human well-being.

### Mission

The mission of CSE in China is to improve the professional level of engineers and contribute to the integrated development of sci-tech and the economy. Internationally, it is to make engineers more global, promote mutual recognition of engineers qualifications, and take part in the global governance of the engineering field.

### Objectives

To be:

- A highly attractive and cohesive community of shared career, values, and future for engineers;
- A vital force in promoting the modernization of national governance;
- An engineering organization with international impact and a voice in international discourse.

## Main Tasks



To increase the effectiveness of value guidance for engineers through cultivating professional ethics and spreading knowledge of engineering technology.



To improve the service system for the professional growth of engineers by conducting competency assessments and continuous professional development courses and commending excellent engineers.



To promote international mutual recognition of engineers qualifications to facilitate global mobility of engineers.



To encourage the coordinated efforts of enterprises, universities, research institutes and consumers so as to accelerate the application of scientific achievements in engineering.



To leverage the wisdom of the engineering community to carry out strategic and scientific consultation, scientific research evaluation and study on intellectual property protection of engineering technology.

## First Council of CSE

### President



#### Wan Gang

Vice Chairman of the 13th National Committee of the Chinese People's Political Consultative Conference (CPPCC)  
President of the 10<sup>th</sup> National Committee of CAST

### Chairman



#### He Junke

Vice President and Chief Executive Secretary of the Secretariat of CAST

### Message from CSE

Innovation and progress in engineering science and technology are not only key factors to develop productive forces and labor productivity, but also important forces to promote the development of education, culture, sports, health and other undertakings. CSE will better serve engineers to realize their value, promote exchanges and cooperation between the Chinese engineering community and international engineering community and contribute more wisdom and strength to promote the realization of global sustainable development goals and the building of a human community with a shared future.

# CSE Members

## National societies



## Local institutions of engineers



## Universities



## Enterprises

