

CHINA ENGINEERING EDUCATION & ACCREDITATION



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In the year of 2017

HEIs: 1,139 HEIs offering engineering programs, ~ **92%** of the total

Students: 5.38 million engineering undergraduates, ~ **33%** of the total

Number of programs: 18,117 engineering programs, ~ **32%** of the total

Large profile to high quality



□ **Great challenges** faced to improve the quality of engineering education with such huge amount

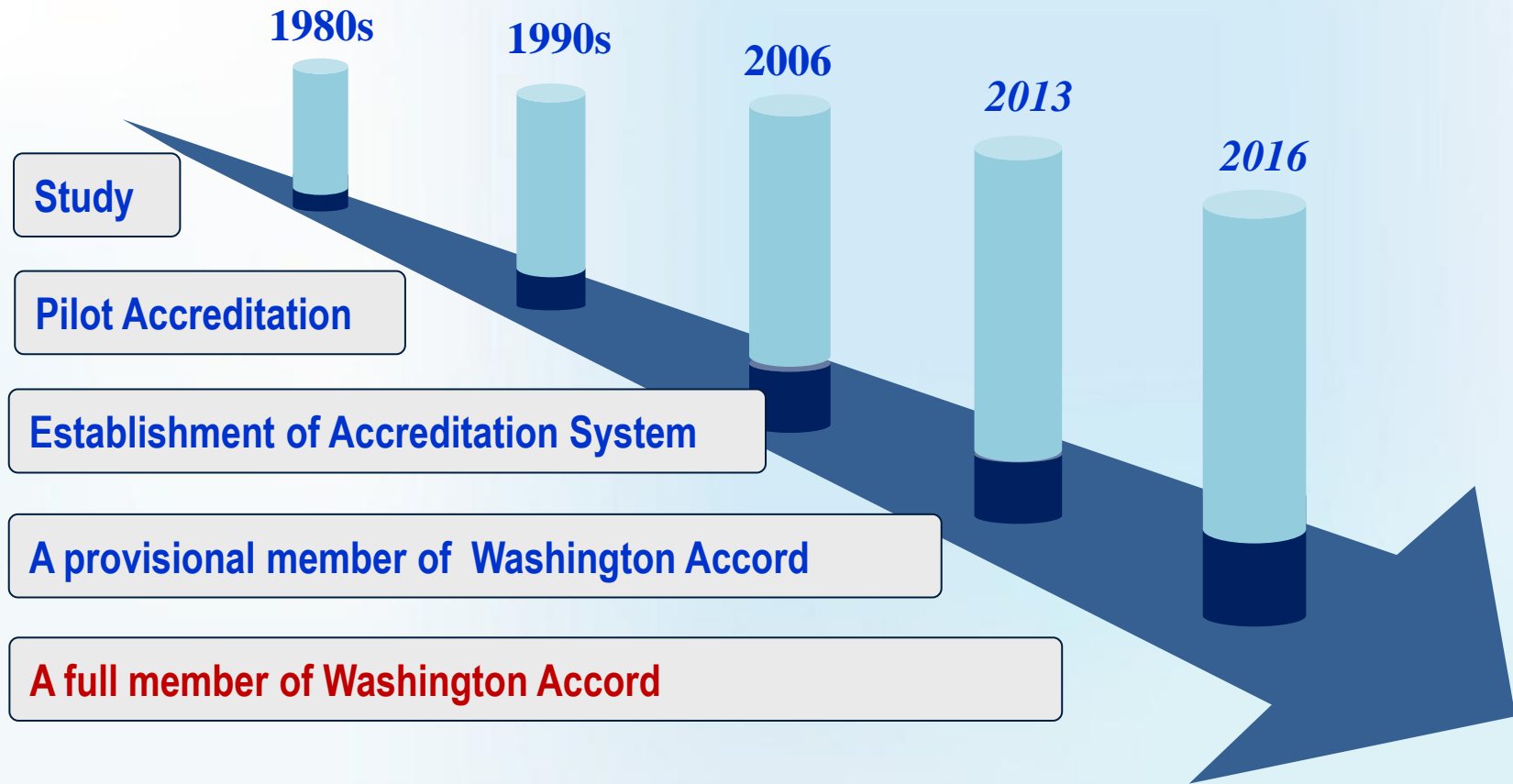
- Mechanism establishment
- Criteria & standards establishment
- Quality assessment
-

Engineering Education Accreditation gives the answers.....

China Engineering Education Accreditation

- **History**
- **Objectives**
- **System**
- **Criteria & Characteristics**
- **Procedures**
- **Trainings**
- **Accredited programs**
- **Effectiveness**
- **Prospect**

History



Objectives



***Profession
Involved***

Establishing the cooperation mechanism
between engineering education and industry

Laying down a solid basis for professional
engineer system

***Professional
Engineer***

***International
Recognition***

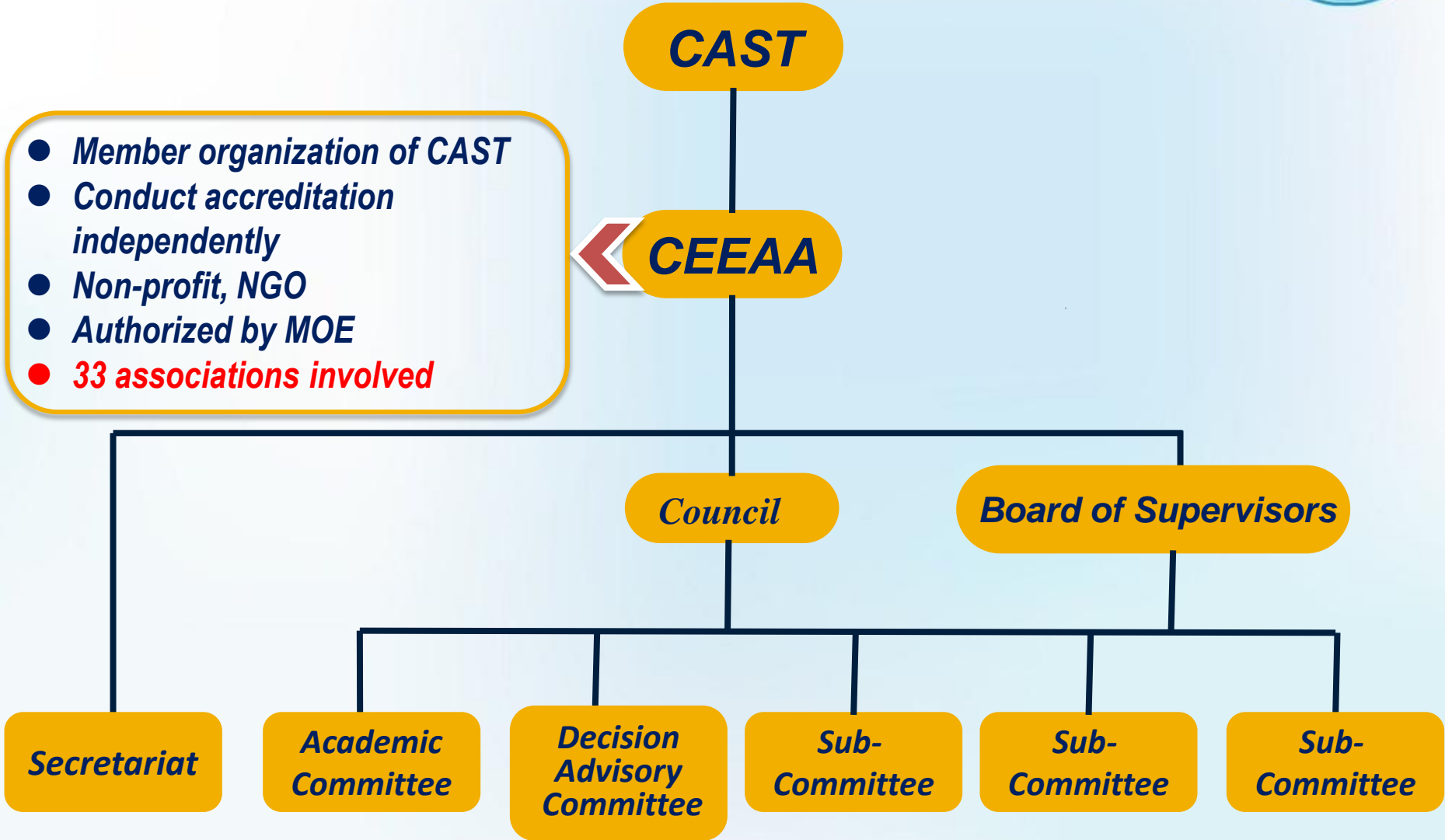
Promoting the international mutual recognition
and enhancing communications with international
counterparts

Promoting the pace of engineering education
reform

***Education
Reform***

Organization system

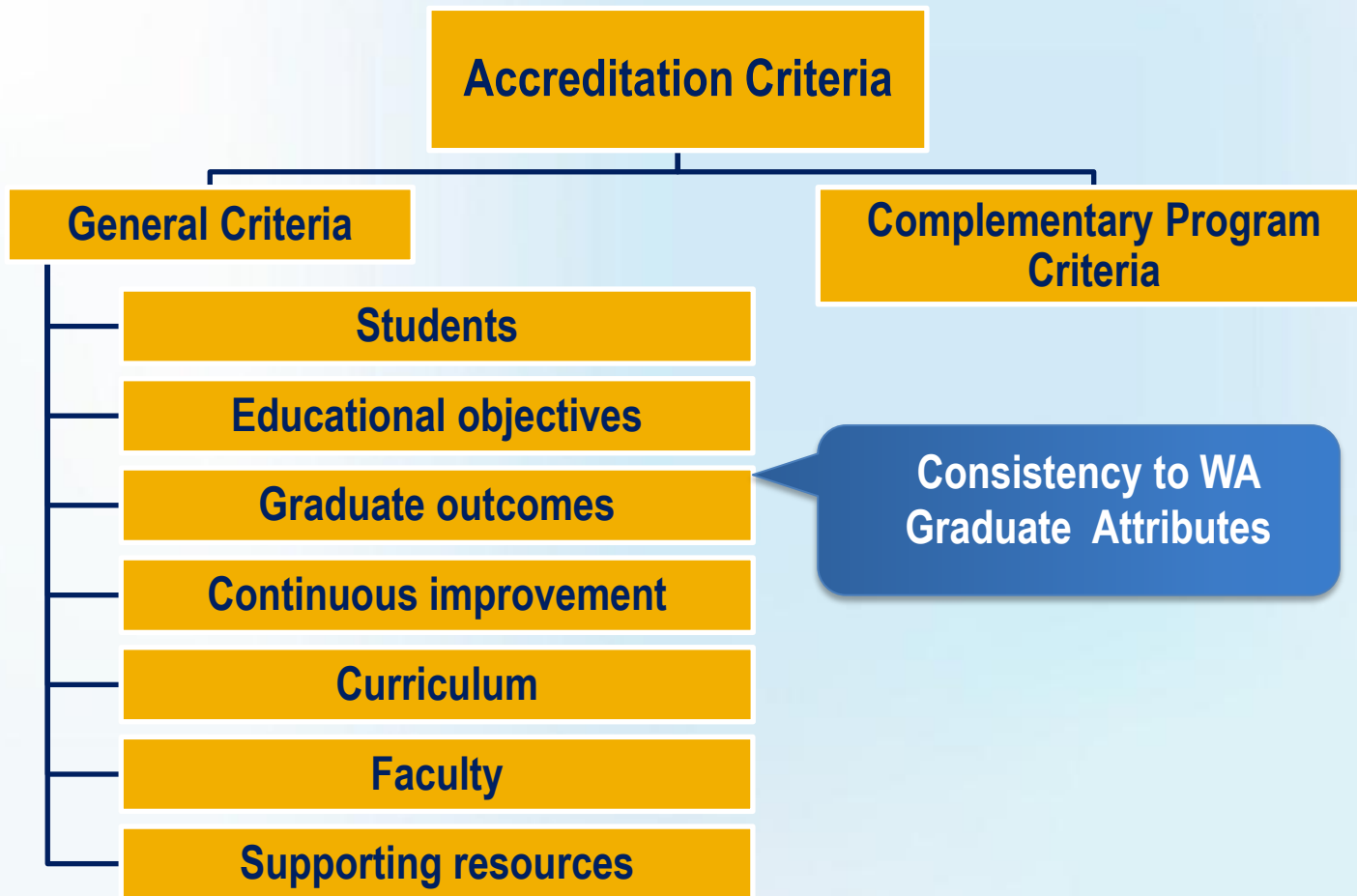
- *Member organization of CAST*
- *Conduct accreditation independently*
- *Non-profit, NGO*
- *Authorized by MOE*
- *33 associations involved*



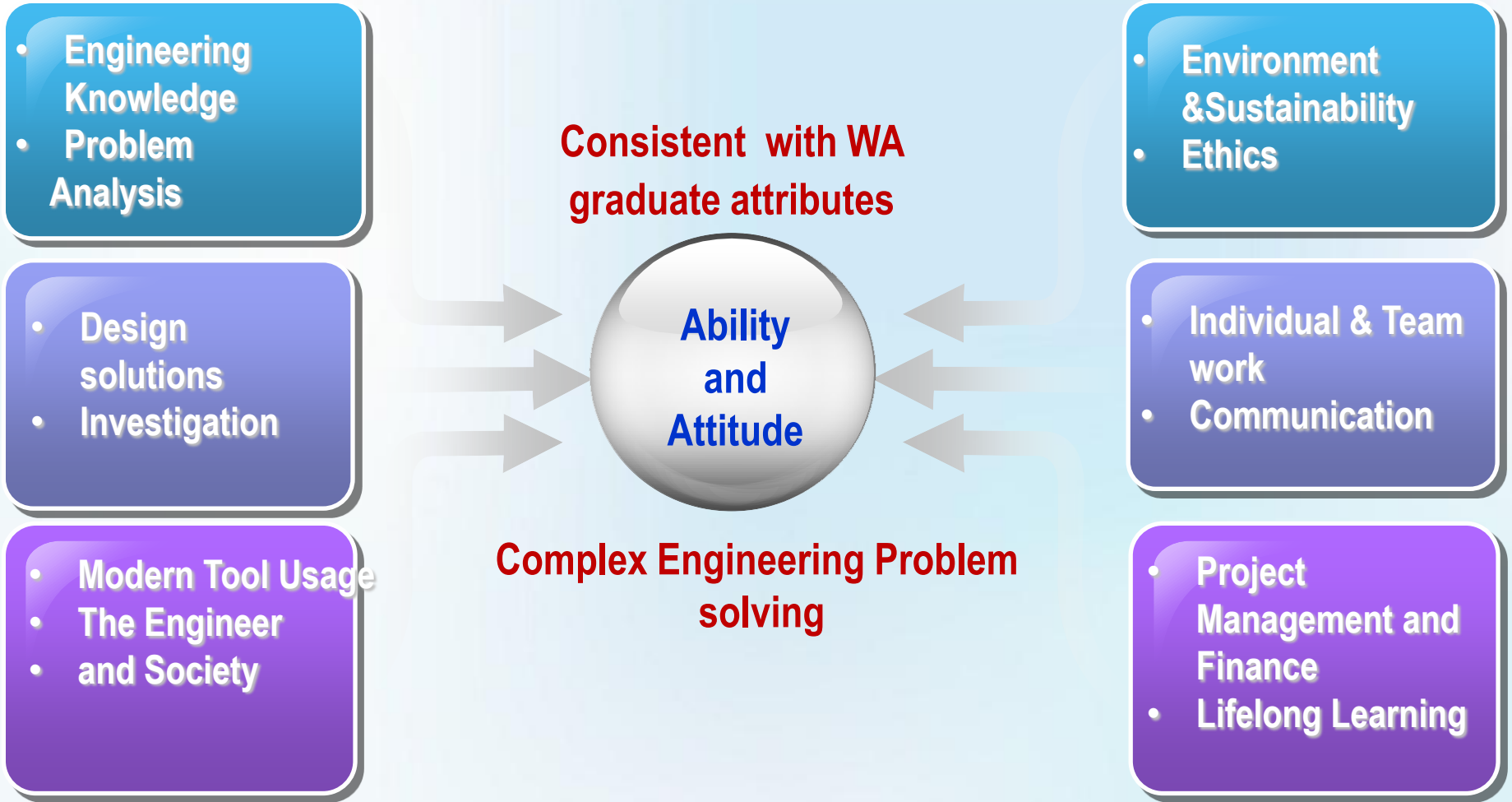
Member units



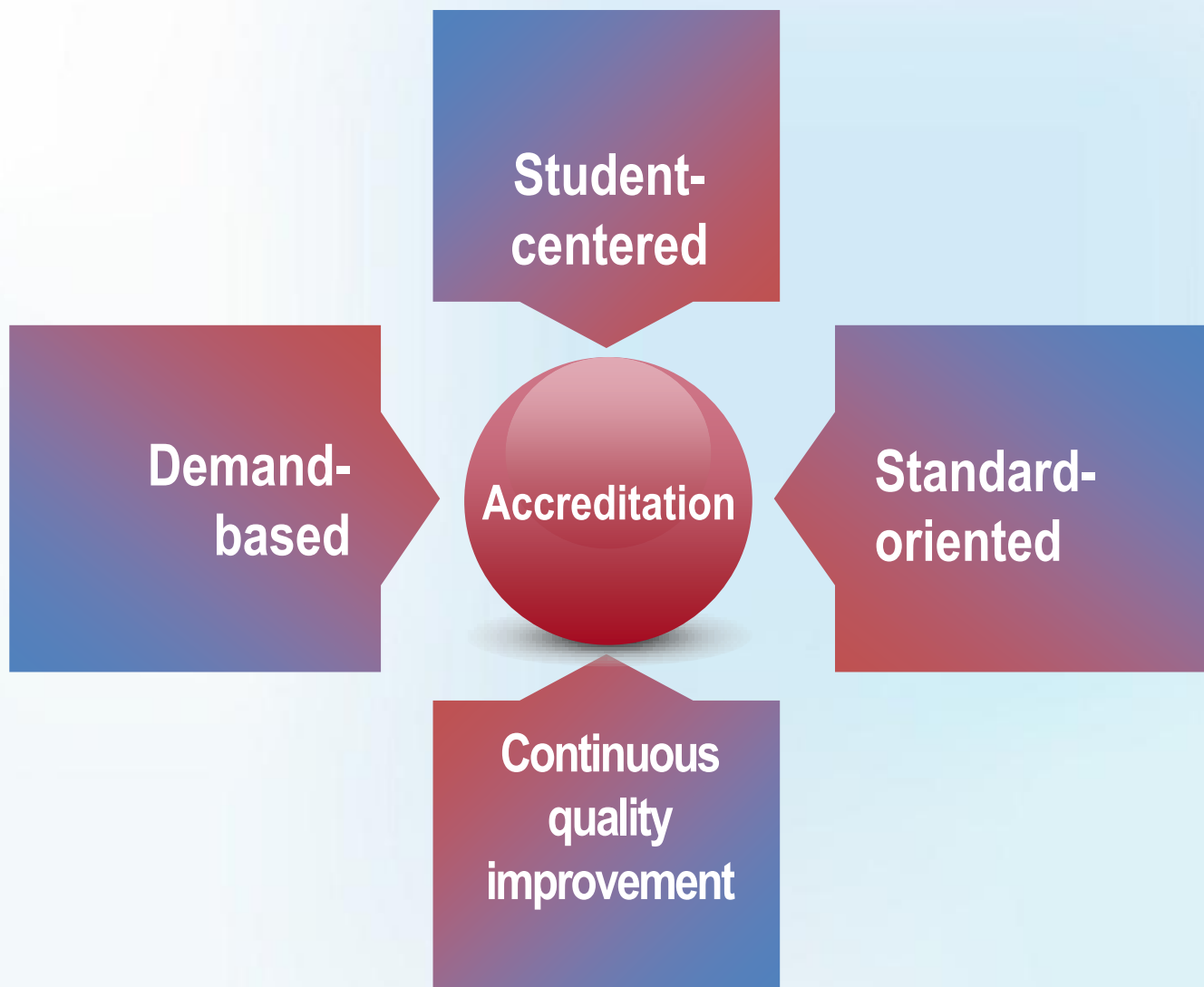
CEEAA



Graduate Outcomes



Accreditation characteristics



Accreditation Procedures



Application and Acceptance



Self-study

- Submitting Self-study Report
- Desk-Reviewing of Self-study Report of Data Analysis Report



On-site Visiting(on-campus& off-campus)

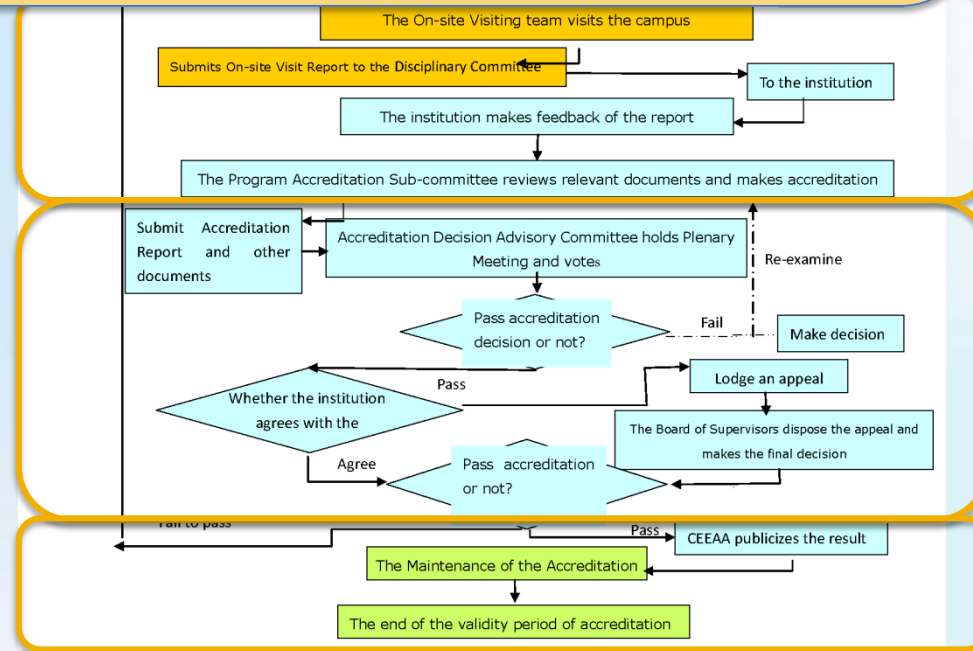


Reviews and Suggestions on Accreditation Decision



Maintenance of Accreditation Status

- Bachelor's programs admitted by MOE
- Program areas covered by the CEEAA
- Programs have at least three cohorts of graduates
- Application report prepared in accordance with the Guidelines



Training



Diversified and multi-level training sessions and workshops

1000+ Team Chairs & Volunteers

800+HEIs , 9000+faculty members

Evaluator training

Case-study training

Philosophy discussion

On-site probation

Program training

workshops for Accepted Program

Symposia for Interested Program

Q&A

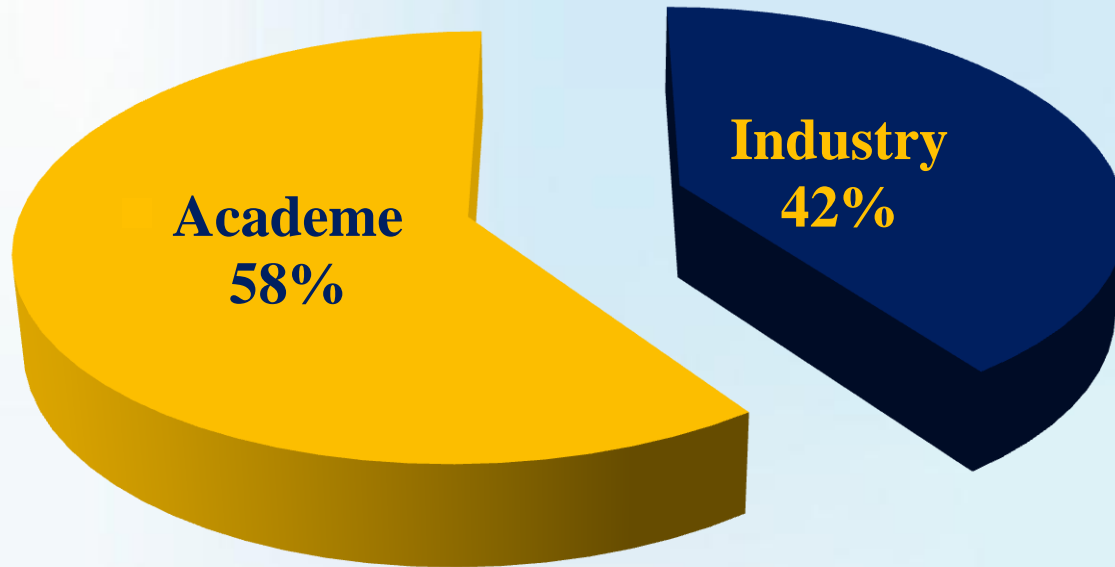
MOOCs



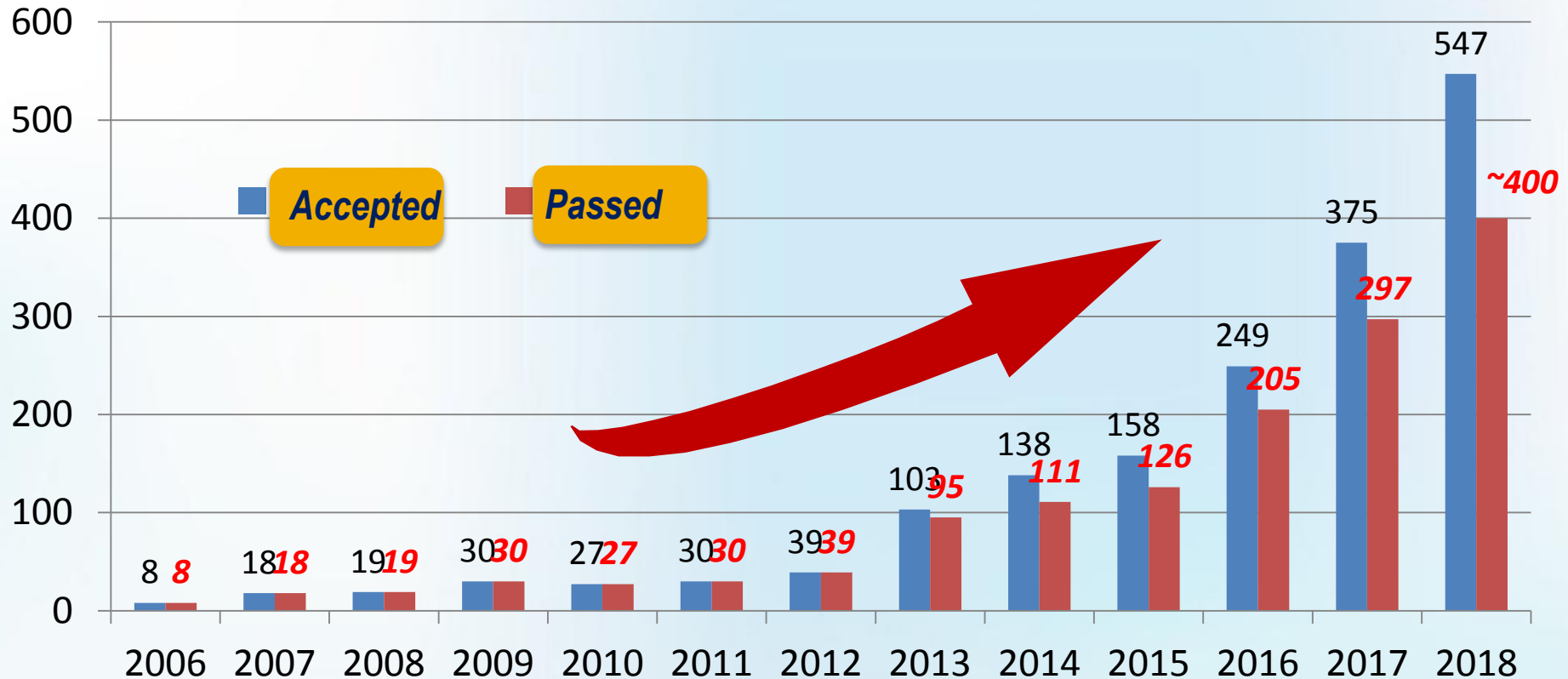
Accreditation experts



Over 1000 well-trained experts in our Expert Pool
42% of them: from industry
58% of them: from academia



Accredited programs



By the end of 2017, **198 HEIs participated in accreditation**
846 accredited programs

Effectiveness



- **OBE is carried out throughout the country.**
- **Guided by the accreditation criteria, educational objectives were revised, curriculum was reorganized, classroom teaching was improved, teachers' responsibility turned to be explicit, assessment mechanism and quality culture were established. The quality of talent cultivation obviously improved.**
- **Student assessment and teacher assessment focused on outcome assessment.**

Prospect



Utilization of information technology during accreditation process

Assistance



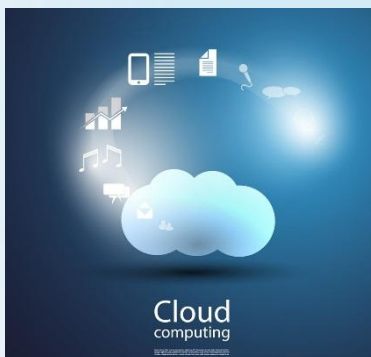
Database of basic educational status



Big Data

Cloud computing

AI analysis



“Excellent Engineer Training Program” (2010)

- Perform research and practice of “Emergent Engineering”
- Establish new philosophies of engineering education
- Innovate the teaching organization model of engineering Education
- Establish cultivation mechanism collaborating with society and industry
- Strengthen engineering teachers' engineering practice ability
- Perfect the system of innovative entrepreneurship education
- Enhance the international shaping power of engineering education
- Establish the quality assurance system with international substantial equivalence

IT makes industries different.

The Internet profoundly changes all kinds of industries.

- Artificial intelligence
- Robot
- Internet of things
- Unmanned vehicle
- 3D printing
- Nano technology
- Biotechnology
- Material science
- Energy storage
- Quantum computing
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VR

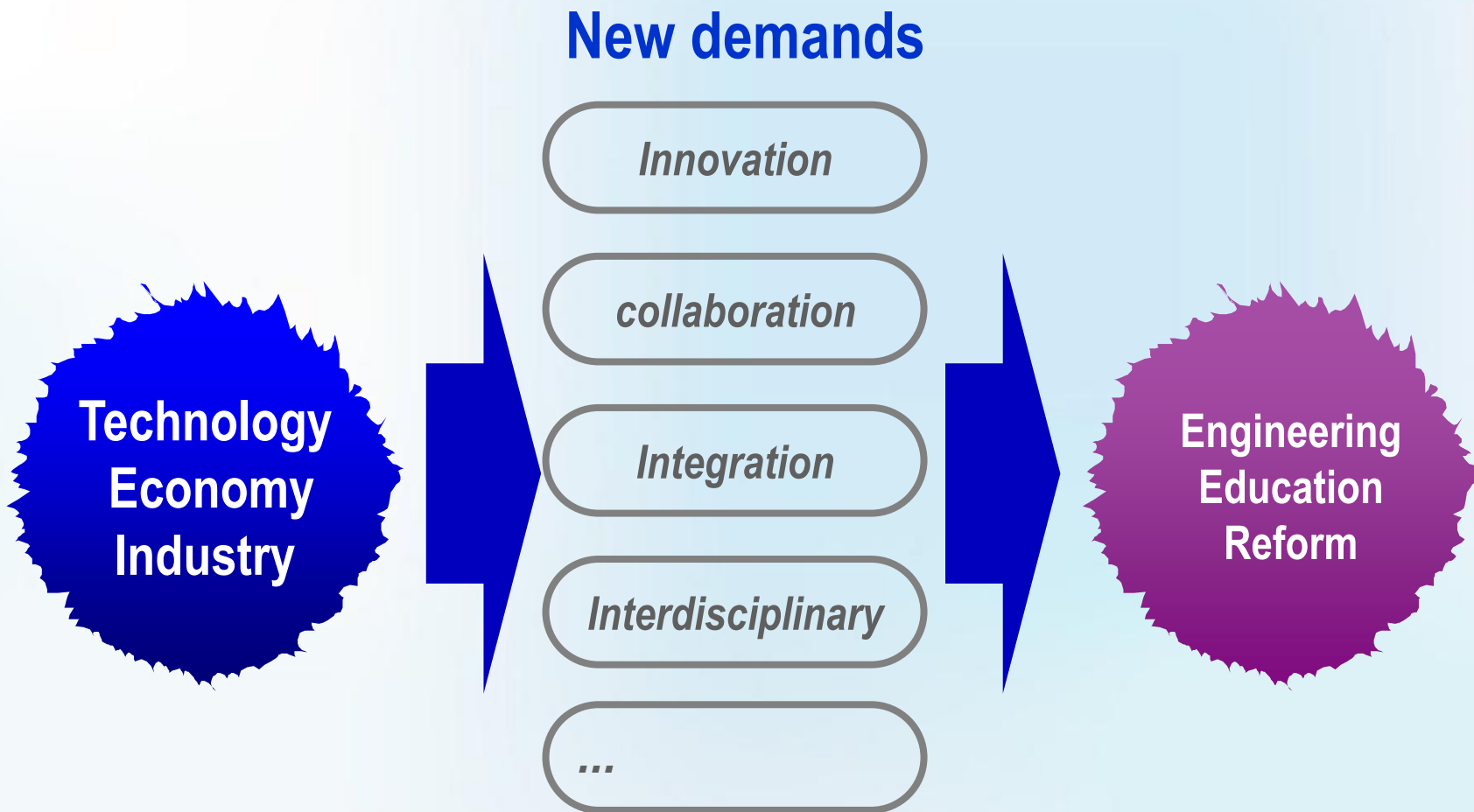


AI



brain-computer interface

New demands of engineering talents and education





China National Education Conference:

- Give priority to the development of Education
- Expand the international opening of education, carry out high level cooperation in running schools, and to enhance the influence of China's education in the world
- Promote education to transform from quantity growth to quality improvement
- Strengthen guidance in setting educational objectives and standards

THANKS !



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