

China Engineering Education and Accreditation

Shuqian Xia

School of Chemical Engineering, Tianjin University, China

Abstract

Over the past 40 years, China's engineering education has prepared more than 20 million talents for industrial and economic development. Nowadays, with industry and technology developing rapidly, engineering education must meet demands accordingly. A large amount of reforms are being undertaken, including the Excellent Engineer Training Program and practice of "Emergent Engineering." Quality plays a key role in these reforms. Therefore, how to improve quality through quality assessment is a great challenge for engineering education. We believe engineering education accreditation provides the answer. China has been working on building an accreditation system in engineering education since 2006. Over the past decade of development, a well-developed accreditation system has been established. In 2016, China became a full member of the Washington Accord. Accreditation is of great significance to engineering education, for example, for ensuring the quality and facilitating the reform of engineering education and enhancing exchanges and mutual recognition in engineering education between China and international counterparts. Engineering education accreditation activities are undertaken by the China Engineering Education Accreditation Association (CEEAA), which is under the umbrella of the China Association of Science and Technology (CAST). There are 33 national members within the CEEAA. All of them are influential National Societies, Associations or Institutes, which cover 20 of the engineering and technology fields nationwide. The accreditation timeline, procedure, visiting schedule, and criteria will be introduced. One of the most essential accreditation criterion, graduate outcomes, will be particularly discussed. Some good practices for insuring our engineering education accreditation, including the training of volunteers and the strict three-level consistency check system, will also be included.



Shuqian Xia is a professor at the School of Chemical Engineering and Technology, Tianjin University, China. She is also the associate dean of the school and in charge of the undergraduate education. She received her PhD degree (2003) in chemical engineering from Tianjin University, China. She has been a visiting scholar at Manchester University, UK. She is the chairman of the Tianjin Research Association of Chemical Process and Equipment Technology and director of the Chemical Industry and Engineering Society of China (CIESC). She has been an experienced expert in the China Engineering Education Accreditation Association (CEEAA) for several years. She is a member of the Editorial Board of Education for Chemical Engineers (a publication of the Institution of Chemical Engineers). She has published four books, including Chemical Engineering Thermodynamics. She has received four National Teaching

Achievement Awards from the Chinese government. Her present scientific interests are focused on chemical engineering thermodynamics and biomass energy utilization technology. She has completed a number of national scientific research projects and published over 60 peer-reviewed papers in the Journal of Thermodynamics, Chemical Engineering Science, etc.