

**Consensus of 2018 International Forum on Engineering Capacity  
(November 22, 2018)**

We, engineering professionals and engineering educators from all over the world, are gathering here in Beijing to participate in the International Forum on Engineering Capacity under the theme of “Capacity Building for a Shared and Better Future of Mankind” from 21<sup>st</sup> to 23<sup>rd</sup> Nov. 2018.

Engineering has laid a solid foundation for the development of humanity. We now understand that human survival and prosperity for all depends on a sustainable natural environment and humankind needs to address social issues through technological innovations. This means that engineering practice is transforming. The rapidly changing world is bringing both opportunities and challenges to the development of engineering capacity, which requires us to think seriously about the future of engineering capacity building.

We have realized:

**Currently the global engineering community is confronted with challenges.** With ever-developing economic globalization, the global governance system has been going through profound transformation, such as increasing mobility and communication among engineering professionals of different countries. Meanwhile, the UN Sustainable Development Goals, as well as various countries’ new objectives for the development of engineering technology, have brought new requirements for engineering professionals’ capabilities. How to fulfill those requirements has become a common issue for the global engineering community.

**For future engineering education, innovation capacity training needs enhancing.** Engineers should not only have deep insights into the technical development trend in some particular fields, but also the ability to cooperate with professionals from different disciplines and different

countries to find creative and comprehensive solutions for complex engineering problems.

**For future engineering capability building, non-technical factors should be taken into consideration.** We should pay attention to humanity, society and nature, and promote sustainable development. We should enhance comprehension of the role of engineering in society and the training of engineering ethics, humanity, nature and entrepreneurship. This will connect the engineering profession closely together with human and environmental wellbeing.

**Future engineering capacity building needs extensive international cooperation.** We should be dedicated to working together on training comprehensive engineering talents, and actively promoting the interdisciplinary, transnational and cross-regional flow and fusion of engineering knowledge, technology and talents.

We believe that a worldwide applicable professional engineering certification system is of great importance for future engineering capacity development. Therefore, the international engineering community should focus on the following:

**1. Vision & Mission.** The engineering vision is to ensure sustainable development and make the world better. All parties share the common vision of improving engineers' capacity to meet the new requirements of the global economic and social development while ensuring a sustainable natural environment, and to promote the international flow of engineering professionals so as to build a future of sustainable development.

**2. Cooperation Platform.** The International Forum on Engineering Capacity is an important platform for promoting mutual communication within global engineering, and a cooperation-oriented dialogue mechanism for discussion of mutual recognition of innovative engineering capacity and engineering education standards. It will promote

international communication and cooperation on a large scale.

**3. Certification System.** For an improvement in engineers' capabilities and promotion of international communication among engineers, as well as the future development of global engineering capacity, it is of vital importance to set an engineering education standard and engineering capacity standard aligned with the UN's sustainable development goals and capable of accommodating constant technology innovation. It is important to promote the international mutual recognition of the engineering education standard and engineering capacity and competence standard worldwide.

We call on the global engineering community to put high value on engineering capacity building and vigorously promote international cooperation through global dialogue and multilateral recognition. Let us work hard together to enhance global engineers' capabilities to create a better future for humankind.