## World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:15, No:01, 2021

## Encouraging Collaboration and Innovation: The New Engineering Oriented Educational Reform in Urban Planning, Tianjin University, China

Authors: Tianjie Zhang, Binggian Cheng, Peng Zeng

Abstract: Engineering science and technology progress and innovation have become an important engine to promote social development. The reform exploration of "new engineering" in China has drawn extensive attention around the world, with its connotation as " to cultivate future diversified, innovative and outstanding engineering talents by taking ' fostering character and civic virtue' as the guide, responding to changes and shaping the future as the construction concept, and inheritance and innovation, crossover and fusion, coordination and sharing as the principal approach". In this context, Tianjin University, as a traditional Chinese university with advantages in engineering, further launched the CCII (Coherent-Collaborative-Interdisciplinary-Innovation) program, raising the cultivation idea of integrating new liberal arts education, multidisciplinary engineering education and personalized professional education. As urban planning practice in China has undergone the evolution of "physical planning -- comprehensive strategic planning -- resource management-oriented planning", planning education has also experienced the transmutation process of " building foundation -- urban scientific foundation -- multi-disciplinary integration". As a characteristic and advantageous discipline of Tianjin University, the major of Urban and Rural Planning, in accordance with the " CCII Program of Tianjin University", aims to build China's top and world-class major, and implements the following educational reform measures: 1. Adding corresponding English courses, such as advanced course on GIS Analysis, courses on comparative studies in international planning involving ecological resources and the sociology of the humanities, etc. 2. Holding " Academician Forum", inviting international academicians to give lectures or seminars to track international frontier scientific research issues. 3. Organizing "International Joint Workshop" to provide students with international exchange and design practice platform. 4. Setting up a business practice base, so that students can find problems from practice and solve them in an innovative way. Through these measures, the Urban and Rural Planning major of Tianjin University has formed a talent training system with multi-disciplinary cross integration and orienting to the future science and technology.

**Keywords:** China, higher education reform, innovation, new engineering education, rural and urban planning, Tianjin University

Conference Title: ICEURP 2021: International Conference on Environmental, Urban and Regional Planning

Conference Location : London, United Kingdom

Conference Dates: January 21-22, 2021