Teaching Mechanics as an Engineering Science in China

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Promoted by Prof Tsien HS, the education in mechanics in China is made as an engineering science. And the graduates are trained to be between engineer and scientist. The main points are as follows. It is an independent discipline to bridge natural science and engineering. It is not only engineering, but concerns common issues in engineering. And it is a guide to new trades in industry, with new concepts, theories and methods. It is aimed at engineering. Since the objects are usually complex systems in practice, it is a necessity for the graduates to grasp the main governing mechanisms, to develop proper models and to get approximate conclusions in agreement with observations. The ability building should include mathematics as a tool, natural sciences as basis, being familiar with problems and methods in engineering and being able to extract the implications from practical problems to form natural laws.

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