



香港城市大學  
City University of Hong Kong

## Invention of Integrated Mechanical Systems by CityU undergraduates

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**Principal Investigator:** Dr. Raymond Hiu-Wai LAM

**Grant Type:** TDG

**Abstract:**

Mechanical Engineering represents a fundamental branch of engineering knowledge and engineering-related industries. For this reason, the major of Mechanical Engineering (M.E.) at City University of Hong Kong has been established recently. To fulfill the rapid demands of expanding markets in the area of automation engineering, dynamical and control analysis, engineering design, and materials/product testing, Here, we propose to provide students opportunities to apply their knowledge learnt from their courses as their own integrated mechanical systems/prototypes, in order to further strengthen their analytical and quantitative skills to tackle scientific and engineering problems, independent and critical thinking to develop/enhance engineering products, and integrated creativity and expertise to generate novel product designs to support sustainable development of the industries. In more detailed, we will encourage students to propose a novel mechanical engineering idea/product; and we will arrange regular workshops and meetings to guide them how to convert the mechanical engineering knowledge as practical techniques in product development. We strongly believe the proposed TDG project can help nurture the key members in the future mechanical engineering industries in Hong Kong.