



香港城市大學  
City University of Hong Kong

## Raising Tech Tigers: A path to technology entrepreneurship education

**Project Number:** 6000776

**Principal Investigator:** Dr. Derek HO

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### **Abstract:**

Technology entrepreneurs are praised for their ability to combine expertise in science/technology and entrepreneurship to benefit mankind; leading to job creation, economic growth and improved human well-being. All science and technology students and graduates have the potential to be technology entrepreneurs. The question is “how” to do so and how to help them transition to be technology entrepreneurs. Although formal entrepreneurship education has been around for a long time, most of them focus on entrepreneurship in general, for example setting up a restaurant, and do not have a strong technology focus.

The proposed project aims to create a self-initiated, collaborative-learning platform for science and engineering students at CityU, typically in the senior undergraduate level, to go beyond the classroom. The program will provide the technical guidance and resources so that students can take conceptual designs and realize them with physical components through the process of rapid prototyping, for example 3D printing.

The platform will be launched primarily from “Design Lab” (MSE3244) and “Smart Sensors” (MSE4127), which are open to students in science and engineering, as well as other disciplines. In these courses, students learn to model and simulate a collection of engineering concepts and designs. Students participating in this project can subsequently enroll in the proposed platform to realize concepts that interest them, making prototypes that can subsequently be demonstrated to the technology community. This process facilitates innovation and provides an environment for entrepreneurship education, such as weekly coaching sessions with the PI and invited industry experts, as well as lab facilities where students can receive technical support. Students are coached to develop an entrepreneurial mindset. For each engagement, we will spend 13 weeks supervising the students to conduct projects that are both technologically feasible and commercially relevant. Keen students are invited to protect their inventions, for example, through the application of patents.

This proposal compliments the University’s effort to train tech tigers. Simultaneously, it extends the effort by offering discipline-specific training, by offering pedagogy and facilities specifically for materials science and electrical engineering, equipping students with entrepreneurial skills that are tailored to their disciplines.