

A collaborative learning platform: from idea incubation to technology transfer

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Principal Investigator: Dr. Derek HO

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Abstract:

Science and engineering students often come up with innovative ideas but lack the necessary skills to translate the concepts into reality. The theory taught solely in the undergraduate classrooms is often inadequate in tackling real-world problems.

The proposed project aims to create a discovery-enriched, 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 prototyping.

The platform will be launched primarily from a new course "Smart Sensors" (AP4127). In this course, 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 industry. This process facilitates innovation and provides a critical path to technology transfer. Keen students are invited to protect their inventions through the application of patents.