



香港城市大學
City University of Hong Kong

Self-motivated and hands-on project platform for development of biomedical engineering applications

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Abstract:

Self-motivated learning with hands-on project experience can significantly enhance learning outcome, which is particularly important for engineering students. Project-based learning would be also an excellent platform for students to reflect on and consolidate what they have learnt in the lectures through hands-on experience. Here, we are proposing a self-motivating project platform for teaching of biomedical instrumentation design in CityU. Design of biomedical engineering application is highly interdisciplinary which requires knowledge from biology/physiology, electronics, mechanics, programming and so on. This proposed project aims to provide a platform to guide volunteering students throughout the process starting from initiation of their own design idea to fabrication and testing of the prototypes. The students need to work as a team to troubleshoot systemically and optimize their own design to solve for real world engineering applications based on the knowledge they have acquired in classes. Students will also learn to document and present their design professionally and technically. The experience from these student participants will be consolidated as teaching materials for future student projects and laboratory sessions.