

## Collaborative Learning Environment for Architecture, Engineering and Construction (AEC) Students to Foster Collaborative Skills Development

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## Abstract:

Construction activities are reliant on teamwork. Designers, engineers and construction professionals have to collaborate closely in order to bring the final success of a project. EvolVing technologies supportteam members to work in geographically different locations to their colleagues. However, this also creates greater challenges to maintain good collaboration among the members. To meet these industrial needs and challenges, our graduates must possess a range of collaborative skills. However, like most of the overseas universities, collaborative working practices and skills are not taught in the local architecture, engineering and construction (AEC) education. The curriculum design of different AEC programmes has very little inter-disciplinary collaboration. Thus, there is a great demand for a change in curriculum design, including the course content, pedagogy, learning environment and assessment, of the existing AEC education. This project is to address the need for such by developing a framework and curriculum resources for collaborative education for AEC students. With the wide adoption of Building information modeling (BIM) in the construction industry, BIM will be used as an integral tool to develop the inter-disciplinary curriculum resources. This project also aims to provide guidelines for designing instructional methods, learning activities and assessment strategies suitable for collaborative learning.