

**The role of building information modeling(BIM) in the  
development of architectural education  
case study (the Environmental Architecture Program at Tanta University)**

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**Abstract:**

At the beginning of the current century, with the advancement of computer technology, a new system emerged that relies on drawing and three-dimensional modeling with the definition and description of all elements of building, technology and software have advanced greatly until the features of the modern system were determined and became more defined and approved in many companies and organizations for design and construction, which is the Building Information Modeling (BIM). Despite the importance of this system, its work in Egypt is limited to foreign institutions, and there is no clear vision for its development and exploitation in urban development and in the sustainable design of new cities and communities.

Therefore, we review in this research the importance of the BIM system and ways to integrate it into the institutions concerned with construction and reconstruction as an interactive system that helps to achieve maximum benefit and come up with the least errors in design and implementation, and its role in the process of developing architectural education and the development of design methods for facilities and methods of training engineers and students in universities and educational bodies, and that is through three main axes the first axis deals with the levels of knowledge by applying building information modeling and its dimensions, the second axis studying strategies for teaching building information modeling technology in architectural education courses, the third axis studying the relationship between the cognitive levels of BIM, its dimensions and its impact on the strategies of teaching courses, in order to present a proposal to integrate building information modeling technology applications to develop architectural education in Egyptian universities.

**Key words**

(building information modeling, BIM, architectural education, Environmental Architecture)